

ETSI informática

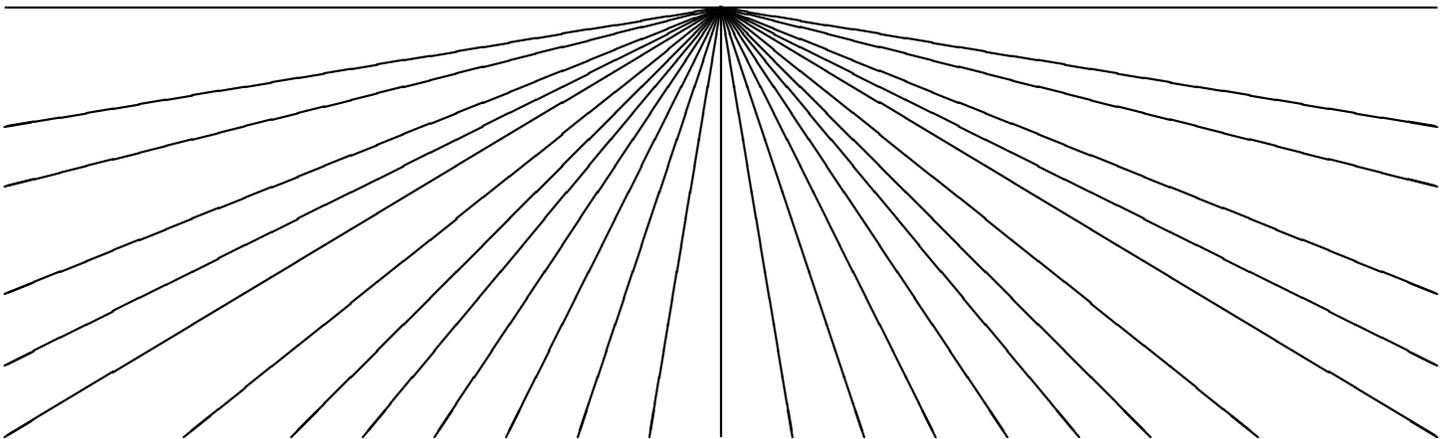
universidad politécnica de madrid

CLIP Group Publications by Topic

The CLIP Group

TR Number **CLIP-PubsBytopic/2025.2732**

Printing date: June 30, 2025



CLIP Group Publications by Topic

Technical Report Number: CLIP-PubsBytopic/2025.2732

Printing date: June 30, 2025

Authors

The CLIP Group

clip@cliplab.org — <http://cliplab.org> — Universidad Politécnica de Madrid (UPM), ETSI Informática, 28660 Boadilla del Monte, Madrid — Spain

Keywords

Publications, By Topic, CLIP Group

Acknowledgements

The work presented in these papers has been carried out in collaboration with numerous other researchers (co-authors of the papers) and institutions, and has been funded in part by a number of public and private agencies. Please refer the CLIP group list of funded research projects for a list of such institutitons.

Abstract

This document provides a unified list of publications by the CLIP group members, *classified by research topic* (as well as by type of publication – journal, book, invited, workshop, etc.). A list of publications classified by year of publication is also available. Please note that this document is generated automatically and periodically from the group database and may contain repetitions, omissions, and other errors. We ask for understanding with these errors and at the same time will very much appreciate any pointers to them.

Resumen

Este documento proporciona una lista unificada de las publicaciones de los miembros del grupo CLIP, *clasificada por temas* (así como por tipo de publicación – revista, libro, invitado, workshop, etc.). También se dispone de una lista de publicaciones clasificada por año de publicación. Este documento se genera automáticamente y de forma periódica a partir de la base de datos del grupo y puede contener repeticiones, omisiones, y otros errores. Rogamos comprensión con estos errores y apreciaremos que se nos señalen.

Contents

1	Publications in Verification, Specification, Testing, Debugging	1
2	Publications in Program Analysis	18
3	Publications in Program Specialization	52
4	Publications in Resource Consumption Analysis and Optimization	60
5	Publications in Analysis of Smart Contracts, Blockchain	71
6	Publications in Automatic Parallelization	72
7	Publications in Task Granularity Analysis and Control	83
8	Publications in Parallel Execution Models and Task Scheduling	86
9	Publications in Distributed/Internet Execution, Agents, and WWW	94
10	Publications in (Parallel) Computer Architecture	100
11	Publications in Program Execution Visualization	101
12	Publications in Programming Language Design	103
13	Publications in Concurrency, Dynamic Scheduling, and Concurrent Languages	121
14	Publications in Constraint Programming	125
15	Publications in Programming Language Implementation	131
16	Publications in Environments and Tools for Software Development	149
17	Publications in Component-Based Software Development	158
18	Publications in Open Source Software	159
19	Publications in Simulation of Parallel Systems	160
20	Publications in Teaching	161

21	Publications in Quality of Service	162
22	Publications in Services	164
23	Publications in Service Aggregation and Composition	167
24	Publications in Graphical Communication	169
25	Publications in Diagrammatic Reasoning	170
26	Publications in Research Policy	171
27	Publications in Other Topics and General Publications	172

1 Publications in Verification, Specification, Testing, Debugging

Articles in Refereed Journals:

1. Daniela Ferreiro, Ignacio Casso, Pedro Lopez-Garcia, José F. Morales, Manuel V. Hermenegildo. *Checkification: A Practical Approach for Testing Static Analysis Truths*. Theory and Practice of Logic Programming, To Appear, Cambridge U. Press, May 2025.
2. Emanuele De Angelis, Fabio Fioravanti, John P. Gallagher, Manuel V. Hermenegildo, Alberto Pettorossi, Maurizio Proietti. *Analysis and Transformation of Constrained Horn Clauses for Program Verification*. Theory and Practice of Logic Programming, Vol. 22, Num. 6, pages 1–69, Cambridge U. Press, November 2021.
3. M.A. Sanchez-Ordaz, I. Garcia-Contreras, V. Perez-Carrasco, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *VeriFly: On-the-fly Assertion Checking via Incrementality*. Theory and Practice of Logic Programming, Vol. 21, Num. 6, pages 768–784, Cambridge U. Press, September 2021.
4. I. Garcia-Contreras, J. F. Morales, M.V. Hermenegildo. *Incremental and Modular Context-sensitive Analysis*. Theory and Practice of Logic Programming, Vol. 21, Num. 2, pages 196–243, Cambridge U. Press, January 2021.
5. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Some Trade-offs in Reducing the Overhead of Assertion Run-time Checks via Static Analysis*. Science of Computer Programming, Vol. 155, pages 3–26, Elsevier North-Holland, April 2018. Selected and Extended papers from the 2016 International Symposium on Principles and Practice of Declarative Programming.
6. P. Lopez-Garcia, L. Darmawan, M. Klemen, U. Liqat, F. Bueno, M.V. Hermenegildo. *Interval-based Resource Usage Verification by Translation into Horn Clauses and an Application to Energy Consumption*. Theory and Practice of Logic Programming, Special Issue on Computational Logic for Verification, Vol. 18, Num. 2, pages 167–223, Cambridge U. Press, March 2018. arXiv:1803.04451.
7. U. Liqat, Z. Banković, P. Lopez-Garcia, M.V. Hermenegildo. *An Evolutionary Scheduling Approach for Trading-off Accuracy vs. Verifiable Energy in Multicore Processors*. Logic Journal of the IGPL, Vol. 25, Num. 6, pages 1006–1019, Oxford Academic Press, December 2017.
8. P. Lopez-Garcia, M. Klemen, U. Liqat, M.V. Hermenegildo. *A General Framework for Static Profiling of Parametric Resource Usage*. Theory and Practice of Logic Programming, 32nd Int'l. Conference on Logic Programming (ICLP'16) Special Issue, Vol. 16, Num. 5-6, pages 849–865, Cambridge U. Press, September 2016.
9. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Practical Run-time Checking via Unobtrusive Property Caching*. Theory and Practice of Logic Programming, 31st Int'l. Conference on Logic Programming (ICLP'15) Special Issue, Vol. 15, Num. 04-05, pages 726–741, Cambridge U. Press, September 2015. <https://arxiv.org/abs/1507.05986>.
10. A. Serrano, P. Lopez-Garcia, M.V. Hermenegildo. *Resource Usage Analysis of Logic Programs via Abstract Interpretation Using Sized Types*. Theory and Practice of Logic Programming, 30th Int'l. Conference on Logic Programming (ICLP'14) Special Issue, Vol. 14, Num. 4-5, pages 739–754, Cambridge U. Press, July 2014.
11. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *An Overview of Ciao and its Design Philosophy*. Theory and Practice of Logic Programming, Vol. 12, Num. 1–2, pages 219–252, Cambridge University Press, January 2012.

12. E. Albert, P. Arenas, G. Puebla, M.V. Hermenegildo. *Certificate Size Reduction in Abstraction-Carrying Code*. Theory and Practice of Logic Programming, Vol. 12, Num. 3, pages 283–318, 2012.
13. M. Gómez-Zamalloa, E. Albert, G. Puebla. *Test Case Generation for Object-Oriented Imperative Languages in CLP*. Theory and Practice of Logic Programming, 26th Int'l. Conference on Logic Programming (ICLP'10) Special Issue, Vol. 10 (4–6), pages 659–674, Cambridge U. Press, July 2010.
14. P. Lopez-Garcia, F. Bueno, M.V. Hermenegildo. *Automatic Inference of Determinacy and Mutual Exclusion for Logic Programs Using Mode and Type Analyses*. New Generation Computing, Vol. 28, Num. 2, pages 117–206, Ohmsha, Ltd. and Springer, 2010.
15. E. Albert, G. Puebla, M.V. Hermenegildo. *Abstraction-Carrying Code: A Model for Mobile Code Safety*. New Generation Computing, Vol. 26, Num. 2, pages 171–204, March 2008.
16. M.V. Hermenegildo, G. Puebla, F. Bueno, P. Lopez-Garcia. *Integrated Program Debugging, Verification, and Optimization Using Abstract Interpretation (and The Ciao System Preprocessor)*. Science of Computer Programming, Vol. 58, Num. 1–2, pages 115–140, Elsevier North-Holland, October 2005.
17. M.V. Hermenegildo. *Some Challenges for Constraint Programming*. The Constraints Journal, Vol. 2, Num. 1, pages 63–69, Kluwer Academic Publishers, 1997. Special issue on strategic directions in constraint programming.

Articles in Refereed Conferences:

1. Ignacio Casso, José F. Morales, Pedro López-García, Manuel V. Hermenegildo. *Testing Your (Static Analysis) Truths*. Logic-Based Program Synthesis and Transformation - 30th International Symposium, Post-Proceedings, Lecture Notes in Computer Science, Vol. 12561, pages 271–292, Springer, 2021.
2. I. Casso, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *An Integrated Approach to Assertion-Based Random Testing in Prolog*. Post-Proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), LNCS, Vol. 12042, pages 159–176, Springer-Verlag, April 2020.
3. M. Klemen, P. Lopez-Garcia, J. Gallagher, J.F. Morales, M.V. Hermenegildo. *A General Framework for Static Cost Analysis of Parallel Logic Programs*. Post-Proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), LNCS, Vol. 12042, pages 19–35, Springer-Verlag, April 2020.
4. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Incremental Analysis of Logic Programs with Assertions and Open Predicates*. Proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), LNCS, Vol. 12042, pages 36–56, Springer, 2020.
5. M. Klemen, N. Stulova, P. Lopez-Garcia, J. F. Morales, M.V. Hermenegildo. *Static Performance Guarantees for Programs with Run-time Checks*. 20th Int'l. ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming (PPDP'18), 13 pages, ACM Press, September 2018.
6. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Exploiting Term Hiding to Reduce Run-time Checking Overhead*. 20th International Symposium on Practical Aspects of Declarative Languages (PADL 2018), LNCS, Num. 10702, pages 99–115, Springer-Verlag, January 2018.

7. U. Liqat, Z. Banković, P. Lopez-Garcia, M.V. Hermenegildo. *Inferring Energy Bounds via Static Program Analysis and Evolutionary Modeling of Basic Blocks*. Logic-Based Program Synthesis and Transformation - 27th International Symposium, LOPSTR 2017, Namur, Belgium, October 10-12, 2017, Revised Selected Papers, Lecture Notes in Computer Science, Vol. 10855, Springer, 2018.
8. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Reducing the Overhead of Assertion Runtime Checks via Static Analysis*. 18th Int'l. ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming (PPDP'16), pages 90–103, ACM Press, September 2016.
9. R. Haemmerlé. *On Combining Backward and Forward Chaining in Constraint Logic Programming*. 16th Int'l. ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming (PPDP'14), 12 pages, ACM Press, September 2014.
10. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Assertion-based Debugging of Higher-Order (C)LP Programs*. 16th Int'l. ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming (PPDP'14), pages 225–235, ACM Press, September 2014.
11. U. Liqat, S. Kerrison, A. Serrano, K. Georgiou, P. Lopez-Garcia, N. Grech, M.V. Hermenegildo, K. Eder. *Energy Consumption Analysis of Programs based on XMOS ISA-Level Models*. Logic-Based Program Synthesis and Transformation, 23rd International Symposium, LOPSTR 2013, Revised Selected Papers, Lecture Notes in Computer Science, Vol. 8901, pages 72–90, Springer, 2014.
12. A. Serrano, P. Lopez-Garcia, F. Bueno, M.V. Hermenegildo. *Sized Type Analysis for Logic Programs*. Vol. 13, Num. 4-5, pages 1–14, Cambridge U. Press, August 2013.
13. Z. Drey, J. F. Morales, M.V. Hermenegildo, M. Carro. *Reversible Language Extensions and their Application in Debugging*. Practical Aspects of Declarative Languages (PADL'13), LNCS, Vol. 7752, Springer, January 2013.
14. E. Albert, P. Arenas, M. Gómez-Zamalloa. *Symbolic Execution of Concurrent Objects in CLP*. Practical Aspects of Declarative Languages (PADL'12), LNCS, Vol. 7149, pages 123–137, Springer, January 2012.
15. E. Mera, T. Trigo, P. Lopez-Garcia, M.V. Hermenegildo. *Profiling for Run-Time Checking of Computational Properties and Performance Debugging in Logic Programs*. Practical Aspects of Declarative Languages (PADL'11), Lecture Notes in Computer Science, Vol. 6539, pages 38–53, Springer-Verlag, January 2011.
16. P. Lopez-Garcia, L. Darmawan, F. Bueno. *A Framework for Verification and Debugging of Resource Usage Properties: Resource Usage Verification*. Technical Communications of the 26th Int'l. Conference on Logic Programming (ICLP'10), Leibniz International Proceedings in Informatics (LIPIcs), Vol. 7, pages 104–113, Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, July 2010.
17. E. Albert, S. Genaim, M. Gómez-Zamalloa. *Parametric Inference of Memory Requirements for Garbage Collected Languages*. 9th International Symposium on Memory Management (ISMM'10), pages 121–130, ACM Press, June 2010.
18. Krishnendu Chatterjee, Luca de Alfaro, Vishwanath Raman, César Sánchez. *Analyzing the Impact of Change in Multi-threaded Programs*. Proc. of the 13th Int'l. Conf. on Fundamental Approaches to Software Engineering (FASE'10), LNCS, Vol. 6013, pages 293–307, Springer, 2010.
19. Alejandro Sánchez, César Sánchez. *Decision Procedures for the Temporal Verification of Concurrent Lists*. Proc. of the 12th Int'l. Conf. on Formal Engineering Methods (ICFEM'10), LNCS, Vol. 6447, pages 74–89, Springer, 2010.

20. E. Mera, P. Lopez-Garcia, M.V. Hermenegildo. *Integrating Software Testing and Run-Time Checking in an Assertion Verification Framework*. 25th Int'l. Conference on Logic Programming (ICLP'09), LNCS, Vol. 5649, pages 281–295, Springer-Verlag, July 2009.
21. E. Albert, S. Genaim, M. Gómez-Zamalloa. *Live Heap Space Analysis for Languages with Garbage Collection*. 8th international symposium on Memory management, pages 129–138, ACM Press, June 2009.
22. M. Marron, D. Kapur, M.V. Hermenegildo. *Identification of Logically Related Heap Regions*. ISMM'09: Proceedings of the 8th international symposium on Memory management, ACM Press, June 2009.
23. M. Marron, D. Kapur, D. Stefanovic, M.V. Hermenegildo. *Identification of Heap-Carried Data Dependence Via Explicit Store Heap Models*. 21st Int'l. WS on Languages and Compilers for Parallel Computing (LCPC'08), LNCS, Springer-Verlag, August 2008.
24. E. Mera, P. Lopez-Garcia, M. Carro, M.V. Hermenegildo. *Towards Execution Time Estimation in Abstract Machine-Based Languages*. 10th Int'l. ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming (PPDP'08), pages 174–184, ACM Press, July 2008.
25. M. Méndez-Lojo, M.V. Hermenegildo. *Precise Set Sharing Analysis for Java-style Programs*. 9th International Conference on Verification, Model Checking and Abstract Interpretation (VMCAI'08), LNCS, Num. 4905, pages 172–187, Springer-Verlag, January 2008.
26. G. Marpons, J. Mariño, M. Carro, A. Herranz, J.J. Moreno-Navarro, L.Å. Fredlund. *Automatic Coding Rule Conformance Checking Using Logic Programming*. 10th International Symposium on Practical Aspects of Declarative Languages (PADL'08), LNCS, Vol. 4902, pages 18–34, Springer Verlag, January 2008.
27. P. Pietrzak, J. Correas, G. Puebla, M.V. Hermenegildo. *A Practical Type Analysis for Verification of Modular Prolog Programs*. ACM SIGPLAN 2008 Workshop on Partial Evaluation and Program Manipulation (PEPM'08), pages 61–70, ACM Press, January 2008.
28. E. Albert, S. Genaim, M. Gómez-Zamalloa. *Heap Space Analysis for Java Bytecode*. Proceedings of the 6th International Symposium on Memory Management (ISMM'07), pages 105–116, ACM Press, October 2007.
29. P. Pietrzak, M.V. Hermenegildo. *Automatic Binding-related Error Diagnosis in Logic Programs*. International Conference on Logic Programming (ICLP'07), LNCS, Num. 4670, pages 333–347, Springer-Verlag, September 2007.
30. M. Méndez-Lojo, J. Navas, M.V. Hermenegildo. *A Flexible (C)LP-Based Approach to the Analysis of Object-Oriented Programs*. 17th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR 2007), Lecture Notes in Computer Science, Num. 4915, pages 154–168, Springer-Verlag, August 2007.
31. E. Albert, M. Gómez-Zamalloa, L. Hubert, G. Puebla. *Verification of Java Bytecode using Analysis and Transformation of Logic Programs*. Ninth International Symposium on Practical Aspects of Declarative Languages (PADL 2007), LNCS, Num. 4354, pages 124–139, Springer-Verlag, January 2007.
32. E. Albert, P. Arenas, G. Puebla. *An Incremental Approach to Abstraction-Carrying Code*. 13th International Conference on Logic for Programming, Artificial Intelligence, and Reasoning (LPAR'06), LNCS, Num. 4246, pages 377–391, Springer-Verlag, November 2006.

33. P. Pietrzak, J. Correias, G. Puebla, M.V. Hermenegildo. *Context-Sensitive Multivariant Assertion Checking in Modular Programs*. 13th International Conference on Logic for Programming Artificial Intelligence and Reasoning (LPAR'06), LNCS, Num. 4246, pages 392–406, Springer-Verlag, November 2006.
34. E. Albert, P. Arenas, G. Puebla, M.V. Hermenegildo. *Reduced Certificates for Abstraction-Carrying Code*. 22nd International Conference on Logic Programming (ICLP 2006), LNCS, Num. 4079, pages 163–178, Springer-Verlag, August 2006.
35. E. Albert, G. Puebla, M.V. Hermenegildo. *Abstraction-Carrying Code*. 11th International Conference on Logic for Programming Artificial Intelligence and Reasoning (LPAR 2004), LNAI, Num. 3452, pages 380–397, Springer-Verlag, March 2005.
36. E. Albert, G. Puebla, M.V. Hermenegildo. *Experiments in Abstract Interpretation-based Code Certification for Pervasive Systems*. Proc. of 2004 IEEE Conference on Systems, Man & Cybernetics (Special Session on Correctness and Reliability for Pervasive/Ubiquitous Computing), 6 pages, IEEE, October 2004.
37. E. Albert, G. Puebla, M.V. Hermenegildo. *Abstract Interpretation-based Mobile Code Certification*. Proc. of International Conference on Logic Programming (ICLP'04), LNCS, Num. 3132, pages 446–447, Springer-Verlag, September 2004. Extended Abstract.
38. J. Gallagher, G. Puebla. *Abstract Interpretation over Non-Deterministic Finite Tree Automata for Set-Based Analysis of Logic Programs*. Fourth International Symposium on Practical Aspects of Declarative Languages, LNCS, Num. 2257, pages 243–261, Springer-Verlag, January 2002.
39. M.V. Hermenegildo. *A Documentation Generator for (C)LP Systems*. International Conference on Computational Logic, CL2000, LNAI, Num. 1861, pages 1345–1361, Springer-Verlag, July 2000.
40. G. Puebla, F. Bueno, M.V. Hermenegildo. *Combined Static and Dynamic Assertion-Based Debugging of Constraint Logic Programs*. Logic-based Program Synthesis and Transformation (LOPSTR'99), LNCS, Num. 1817, pages 273–292, Springer-Verlag, March 2000.
41. G. Smedbäck, M. Carro, M.V. Hermenegildo. *Interfacing Prolog and VRML and its Application to Constraint Visualization*. The Practical Application of Constraint Technologies and Logic programming, pages 453–471, The Practical Application Company, April 1999.
42. G. Puebla, F. Bueno, M.V. Hermenegildo. *A Framework for Assertion-based Debugging in Constraint Logic Programming (abstract)*. Proceedings of the International Conference on Principles and Practice of Constraint Programming (CP'98), LNCS, Num. 1520, pages 472–473, Springer-Verlag, October 1998.
43. G. Puebla, M. Comini, W. Drabent, M. Ducass, M. Fabris, M. Meier, Ch. Schulte. *Tools and Environments for Constraint Logic Programming*. International Logic Programming Symposium, pages 417–418, October 1997. Workshop abstract.
44. M. Carro, L. Gómez, M.V. Hermenegildo. *Some Paradigms for Visualizing Parallel Execution of Logic Programs*. 1993 International Conference on Logic Programming, pages 184–201, MIT Press, June 1993.

Books and Monographs:

1. David S. Warren, Veronica Dahl, Thomas Eiter, Manuel V. Hermenegildo, Robert Kowalski, Francesca Rossi. *Prolog - The Next 50 Years*. LNCS, Num. 13900, Springer, July 2023.

2. I. Garcia-Contreras. *A Scalable Static Analysis Framework for Reliable Program Development Exploiting Incrementality and Modularity*. Ph.D. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 42 pages, July 2021. Advisors: M.V. Hermenegildo and Jose F. Morales.
3. Casso, Ignacio. *An Integrated Approach to Assertion-Based Random Testing in Logic Languages*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 42 pages, July 2021. MSc Thesis.
4. Jurjo Rivas, Daniel. *Abstract Domain for Floating-point Programs*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 58 pages, July 2021. MSc Thesis.
5. Pérez Carrasco, Víctor. *Improvements to Parametric Cost Analysis and its Application to Smart Contracts*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 63 pages, July 2021. MSc Thesis.
6. Maximiliano Klemen. *A General Framework for Static Resource Analysis and Profiling of (Parallel) Programs and an Application to Runtime Checking*. Ph.D. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, March 2021.
7. Pérez Carrasco, Víctor. *Analysis of Smart Contracts using Horn Clauses*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 76 pages, June 2020. BSc Thesis.
8. Umer Liqat. *A Multi-Language and Multi-Platform Framework for Resource Consumption Analysis and its Application to Energy-Efficient Software Development*. Ph.D. Thesis, Escuela Técnica Superior de Ingenieros Informáticos, UPM, July 2018.
9. Casso, Ignacio. *Towards Computing Distances Among Abstract Interpretations*. Ms. Thesis, Universidad Complutense de Madrid, 60 pages, June 2018. BSc Thesis.
10. Nataliia Stulova. *Dynamic Checking of Assertions for Higher-order Predicates*. Ms. Thesis, Technical University of Madrid, School of Computer Science, E-28660, Boadilla del Monte, Madrid, Spain, 73 pages, July 2013.
11. P. Chico de Guzmán. *Advanced Evaluation Strategies for Tabling and Parallelism in Logic Programs*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informática UPM, 28660-Boadilla del Monte, Madrid-Spain, November 2012.
12. E. Mera. *A Unified Framework for Resource and Execution Time Analysis, Run-Time Checking and Unit-Testing*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informática UPM, 28660-Boadilla del Monte, Madrid-Spain, November 2010.
13. M. Méndez-Lojo. *A Generic Approach to Bytecode Analysis*. Ph.D. Thesis, University of New Mexico (UNM), Department of Computer Science, University of New Mexico, Albuquerque, NM 87131-0001 (USA), August 2008.
14. J. Navas. *Analysis and Inference of Resource Usage Information*. Ph.D. Thesis, University of New Mexico (UNM), Department of Computer Science, University of New Mexico, Albuquerque, NM 87131-0001 (USA), August 2008.
15. J. Correias. *Analysis and Verification of Modular Programs*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informática UPM, 28660-Boadilla del Monte, Madrid-Spain, June 2008.
16. D. Cabeza. *An Extensible, Global Analysis Friendly Logic Programming System*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informática UPM, 28660-Boadilla del Monte, Madrid-Spain, August 2004.

17. P. Deransart, M.V. Hermenegildo, J. Maluszynski. *Analysis and Visualization Tools for Constraint Programming*. LNCS, Num. 1870, 350 pages, Springer-Verlag, September 2000.
18. J.M. Ramos. *VIFID: Variable Visualization for Constraint Domains*. Ms. Thesis, Technical University of Madrid, School of Computer Science, E-28660, Boadilla del Monte, Madrid, Spain, September 1998.
19. G. Puebla. *Advanced Compilation Techniques based on Abstract Interpretation and Program Transformation*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informatica UPM, 28660-Boadilla del Monte, Madrid-Spain, November 1997.
20. A. López Luengo. *APT: implementación de un visualizador gráfico de la ejecución de programas lógicos*. Ms. Thesis, Technical University of Madrid, School of Computer Science, E-28660, Boadilla del Monte, Madrid, Spain, October 1997. In Spanish.

Invited Papers and Tutorials:

1. M.V. Hermenegildo, I. Garcia-Contreras, J.F. Morales, P. Lopez-Garcia, L. Rustenholz, D. Ferreiro, D. Jurjo. *On-the-fly Verification via (Incremental, Interactive) Abstract Interpretation with CiaoPP and Verify*. October 2023. Keynote at LOPSTR'23/SPLASH'23. Video available here.
2. M.V. Hermenegildo. *50-Years of Prolog and Beyond (invited talk)*. November 2022. Keynote given at the Prolog 50th Anniversary 'Prolog Day Symposium'.
3. M.V. Hermenegildo. *Some reflections on Prolog's evolution, status, and future on the 50th anniversary of the birth of Prolog (abstract of invited talk)*. 38th International Conference on Logic Programming (ICLP'22 at FLoC'22), August 2022.
4. J. Gallagher, M.V. Hermenegildo, B. Kafle, M. Klemen, P. Lopez-Garcia, J.F. Morales. *From big-step to small-step semantics and back with interpreter specialization (invited paper)*. Proceedings of the Eighth International Workshop on Verification and Program Transformation (VPT 2020), Electronic Proceedings in Theoretical Computer Science (EPTCS), pages 50–65, Open Publishing Association (OPA), September 2020. Co-located with ETAPS 2020.
5. M.V. Hermenegildo, I. Garcia-Contreras, J. Morales, P. Lopez-Garcia, M. Klemen, I. Casso. *Multivariant Assertion-based Guidance of Top-down Horn Clause-based Analysis in CiaoPP*. Workshop on Declarative Program Analysis (DPA 2019), 1 pages, July 2019. (Abstract of invited talk). Associated to FCRC 2019.
6. M.V. Hermenegildo, M. Carro, P. Lopez-Garcia, J.F. Morales, J. Arias, I. Garcia-Contreras, M. Klemen, N. Stulova. *25 Years of Ciao (abstract of invited tutorial)*. Pre-proceedings of the 28th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'18), September 2018. Talk slides at https://cliplab.org/papers/ciao_tut_lopstr18.pdf.
7. M.V. Hermenegildo, P. Lopez-Garcia, J. Morales, I. Garcia-Contreras, M. Klemen, N. Stulova. *Horn Clause-based Program Analysis and Verification with CiaoPP*. 1st International Workshop on Declarative Program Analysis (DPA 2018), 1 pages, July 2018. (Abstract of invited talk). Associated to ECOOP/ISSTA 2018.
8. M.V. Hermenegildo, P. Lopez-Garcia, U. Liqat, M. Klemen. *Energy Consumption Analysis and Verification by Transformation into Horn Clauses and Abstract Interpretation*. 5th International Workshop on Verification and Program Transformation (VPT 2017), Vol. 253, pages 4–6, EPTCS, April 2017. (Abstract of invited talk).
9. Elvira Albert. *From Termination to Cost (in Object-Oriented Languages)*. Workshop on Termination (WST'10), 1 pages, July 2010.

10. Elvira Albert. *Upper Bounds on Memory Usage for Garbage-Collected Languages*. Workshop on Quantitative Analysis of Software (QA'09), 1 pages, June 2009.
11. G. Barthe, L. Beringer, P. Crégut, B. Grégoire, M. Hofmann, P. Müller, E. Poll, G. Puebla, I. Stark, E. Vétillard. *MOBIUS: Mobility, Ubiquity, Security: Objectives and progress report*. Trustworthy Global Computing'06, LNCS, Num. 4661, pages 10–29, Springer, March 2007.
12. G. Puebla, E. Albert, P. Arenas, M.V. Hermenegildo. *On Abstraction-Carrying Code and Certificate-Size Reduction*. 1st International Workshop on Emerging Applications of Abstract Interpretation (EAAI 2006), 15 pages, March 2006.
13. G. Puebla, E. Albert, M.V. Hermenegildo. *Abstract Interpretation-based Verification/Certification in the CiaoPP System*. Mobile Code Safety and Program Verification Using Computational Logic Tools (MoveLog'05), 9 pages, October 2005.
14. M.V. Hermenegildo, E. Albert, P. Lopez-Garcia, G. Puebla. *Abstraction Carrying Code and Resource-Awareness*. 7th ACM-SIGPLAN International Symposium on Principles and Practice of Declarative Programming (PPDP'05), pages 1–11, ACM Press, July 2005.
15. M.V. Hermenegildo, E. Albert, P. Lopez-Garcia, G. Puebla. *Some Techniques for Automated, Resource-Aware Distributed and Mobile Computing in a Multi-Paradigm Programming System*. Proc. of EURO-PAR 2004, LNCS, Num. 3149, pages 21–37, Springer-Verlag, August 2004.
16. M.V. Hermenegildo, G. Puebla, F. Bueno, P. Lopez-Garcia. *Program Development Using Abstract Interpretation (and The Ciao System Preprocessor)*. 10th International Static Analysis Symposium (SAS'03), LNCS, Num. 2694, pages 127–152, Springer-Verlag, June 2003.
17. M.V. Hermenegildo, G. Puebla, F. Bueno, P. Lopez-Garcia. *Abstract Verification and Debugging of Constraint Logic Programs*. Recent Advances in Constraints, LNCS, Num. 2627, pages 1–14, Springer-Verlag, January 2003.
18. M.V. Hermenegildo, F. Bueno, G. Puebla, P. Lopez-Garcia. *Program Debugging and Validation Using Semantic Approximations and Partial Specifications*. 29 th. International Colloquium on Automata, Languages, and Programming (ICALP), LNCS, Num. 2380, pages 69–72, Springer-Verlag, July 2002.
19. M.V. Hermenegildo, F. Bueno, G. Puebla, P. Lopez-Garcia. *Program Analysis, Debugging and Optimization Using the Ciao System Preprocessor*. 1999 Int'l. Conference on Logic Programming, pages 52–66, MIT Press, November 1999.
20. M.V. Hermenegildo, The CLIP Group. *Programming with Global Analysis*. Proceedings of ILPS'97, pages 49–52, MIT Press, October 1997. (abstract of invited talk).
21. F. Bueno, P. Deransart, W. Drabent, G. Ferrand, M.V. Hermenegildo, J. Maluszynski, G. Puebla. *On the Role of Semantic Approximations in Validation and Diagnosis of Constraint Logic Programs*. Proc. of the 3rd Int'l. Workshop on Automated Debugging-AADEBUG'97, pages 155–170, U. of Linköping Press, May 1997.

Articles in Books and Other Collections:

1. Gopal Gupta, Elmer Salazar, Joaquín Arias, Kinjal Basu, S Varanasi, M Carro. *Prolog: Past, Present, and Future*. Prolog - The Next 50 Years, LNCS, Num. 13900, Springer, July 2023.
2. M.V. Hermenegildo, J.F. Morales, P. Lopez-Garcia, M. Carro. *Types, modes and so much more – the Prolog way*. Prolog - The Next 50 Years, LNCS, Num. 13900, pages 23–37, Springer, July 2023.

3. P. Lopez-Garcia, M.V. Hermenegildo, M. Klemen, U. Liqat. *Energy Consumption Analysis and Verification using CiaoPP*. The ALP Newsletter, Vol. 30, Num. 3, The Association for Logic Programming, September 2017.
4. U. Liqat, K. Georgiou, S. Kerrison, P. Lopez-Garcia, M.V. Hermenegildo, J. P. Gallagher, K. Eder. *Inferring Parametric Energy Consumption Functions at Different Software Levels: ISA vs. LLVM IR*. Foundational and Practical Aspects of Resource Analysis: 4th International Workshop, FOPARA 2015, London, UK, April 11, 2015. Revised Selected Papers, Lecture Notes in Computer Science, Vol. 9964, pages 81–100, Springer, 2016.
5. K. Georgiou, U. Liqat. *Towards LLVM-Based Energy Consumption Analysis of Programs*. ICT-Energy (Nanoenergy) Letters, Num. 8, pages 16–17, July 2014.
6. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Zanardini. *Resource Usage Analysis and its Application to Resource Certification*. 9th International School on Foundations of Security Analysis and Design (FOSAD’09), Lecture Notes in Computer Science, Num. 5705, pages 258–288, Springer, 2009.
7. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, J.F. Morales, G. Puebla. *An Overview of The Ciao Multiparadigm Language and Program Development Environment and its Design Philosophy*. Festschrift for Ugo Montanari, LNCS, Vol. 5065, pages 209–237, Springer-Verlag, June 2008.
8. M. Carro, M.V. Hermenegildo. *Visualization Designs for Constraint Logic Programming*. Vol. 2, Num. 2, pages 27–34, Swiss Informatics Societies, April 2001. Also in UPGRADE. Available through <https://www.svifsi.ch/revue/>.
9. M. Carro, M.V. Hermenegildo. *Diseño de visualizaciones para programación lógica con restricciones*. Num. 150, pages 31–37, Asociación de Técnicos en Informática, March 2001.
10. M. Carro, M.V. Hermenegildo. *Tools for Search Tree Visualization: The APT Tool*. Analysis and Visualization Tools for Constraint Programming, LNCS, Num. 1870, pages 237–252, Springer-Verlag, September 2000.
11. G. Puebla, F. Bueno, M.V. Hermenegildo. *A Generic Preprocessor for Program Validation and Debugging*. Analysis and Visualization Tools for Constraint Programming, LNCS, Num. 1870, pages 63–107, Springer-Verlag, September 2000.
12. G. Puebla, F. Bueno, M.V. Hermenegildo. *An Assertion Language for Constraint Logic Programs*. Analysis and Visualization Tools for Constraint Programming, LNCS, Num. 1870, pages 23–61, Springer-Verlag, September 2000.
13. P. Deransart, M.V. Hermenegildo, J. Maluszynski. *Debugging of Constraint Programs: The DiSCiPl Methodology and Tools*. Analysis and Visualization Tools for Constraint Programming, LNCS, Num. 1870, pages 1–20, Springer-Verlag, September 2000.
14. M. Carro, M.V. Hermenegildo. *Tools for Constraint Visualization: The VIFID/TRIFID Tool*. Analysis and Visualization Tools for Constraint Programming, LNCS, Num. 1870, pages 253–272, Springer-Verlag, September 2000.
15. M.V. Hermenegildo, G. Puebla, F. Bueno. *Using Global Analysis, Partial Specifications, and an Extensible Assertion Language for Program Validation and Debugging*. The Logic Programming Paradigm: a 25–Year Perspective, pages 161–192, Springer-Verlag, July 1999.

Publications in Refereed Workshops:

1. G. Garcia-Pradales, J.F. Morales, M.V. Hermenegildo, J. Arias, M. Carro. *An s(CASP) In-Browser Playground based on Ciao Prolog*. Proceedings of the 38th ICLP Workshops - Goal-directed Execution of Answer Set Programs, Vol. 3193, CEUR-WS.org, August 2022.

2. Bishoksan Kafle, John P. Gallagher, Manuel V. Hermenegildo, Maximiliano Klemen, Pedro Lopez-Garcia, José F. Morales. *Regular Path Clauses and their Application in Solving Loops*. Proceedings of the Eighth International Workshop on Horn Clauses for Verification and Synthesis (HCVS 2021), Electronic Proceedings in Theoretical Computer Science (EPTCS), Vol. 344, pages 22–35, Open Publishing Association (OPA), August 2021. Co-located with ETAPS 2021.
3. M. A. Sanchez-Ordaz, I. Garcia-Contreras, V. Perez-Carrasco, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *VeriFly: On-the-fly Assertion Checking with CiaoPP*. 6th Workshop on Formal Integrated Development Environment (F-IDE 2021, part of NASA NFM'21), Electronic Proceedings in Theoretical Computer Science (EPTCS), pages 1–5, Open Publishing Association (OPA), May 2021. Co-located with ETAPS 2021.
4. I. Garcia-Contreras, J. F. Morales, M.V. Hermenegildo. *Incremental and Modular Context-sensitive Analysis*. Workshop on Horn Clauses for Verification and Synthesis (HCVS 2021), March 2021. (Talk).
5. Joaquín Arias, Gopal Gupta, Manuel Carro. *A Short Tutorial on s(CASP), a Goal-directed Execution of Constraint Answer Set Programs*. Proceedings of the 37th ICLP 2021 Workshops, Vol. 2970, CEUR-WS.org, 2021.
6. I. Casso, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *Testing Your (Static Analysis) Truths*. Pre-proceedings of the 30th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'20), September 2020.
7. I. Casso, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *An Integrated Approach to Assertion-Based Random Testing in Prolog*. Pre-proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), November 2019.
8. M. Klemen, P. Lopez-Garcia, J. Gallagher, J.F. Morales, M.V. Hermenegildo. *A General Framework for Static Cost Analysis of Parallel Logic Programs*. Pre-proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), November 2019.
9. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Experiments in Context-Sensitive Incremental and Modular Static Analysis in CiaoPP*. 10th Workshop on Tools for Automatic Program Analysis (TAPAS'19), October 2019. (Extended Abstract).
10. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Incremental Analysis of Logic Programs with Assertions and Open Predicates*. Pre-proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), October 2019.
11. P. Lopez-Garcia, M. Klemen, U. Liqat, M.V. Hermenegildo. *A General Framework for Static Profiling of Parametric Resource Usage (extended abstract)*. 19th International Workshop on Logic and Computational Complexity (LCC 2018), 4 pages, July 2018. Associated to FLOC 2018.
12. I. Garcia-Contreras, J. F. Morales, M.V. Hermenegildo. *Towards Incremental and Modular Context-sensitive Analysis*. Technical Communications of the 34th International Conference on Logic Programming (ICLP 2018), OpenAccess Series in Informatics (OASiCs), 2 pages, Dagstuhl Press, July 2018. (Extended Abstract).
13. M. Klemen, N. Stulova, P. Lopez-Garcia, J. F. Morales, M.V. Hermenegildo. *Towards Static Performance Guarantees for Programs with Run-time Checks*. Technical Communications of the 34th International Conference on Logic Programming (ICLP 2018), OpenAccess Series in Informatics (OASiCs), 2 pages, July 2018. (Extended Abstract).

14. U. Liqat, Z. Banković, P. Lopez-Garcia, M.V. Hermenegildo. *Inferring Energy Bounds via Static Program Analysis and Evolutionary Modeling of Basic Blocks*. Pre-proceedings of the 27th International Symposium on Logic-Based Program Synthesis and Transformation (LOPSTR'17), October 2017. arXiv:1601.02800.
15. Nataliia Stulova. *On Improving Run-time Checking in Dynamic Languages*. Technical Communications of the 33rd International Conference on Logic Programming (ICLP 2017), OpenAccess Series in Informatics (OASICs), Vol. 58, pages 1501–1510, Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, 2017. CP/ICLP/SAT Doctoral Program 2017.
16. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Towards Run-time Checks Simplification via Term Hiding*. Technical Communications of the 33rd International Conference on Logic Programming (ICLP 2017), OpenAccess Series in Informatics (OASICs), Vol. 58, pages 91–93, Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, 2017. (Extended Abstract).
17. U. Liqat, Z. Banković, P. Lopez-Garcia, M.V. Hermenegildo. *Inferring Energy Bounds Statically by Evolutionary Analysis of Basic Blocks*. Workshop on High Performance Energy Efficient Embedded Systems (HIP3ES 2016), 2016. arXiv:1601.02800.
18. R. Haemmerle, M.V. Hermenegildo, M. Klemen, U. Liqat, P. Lopez-Garcia. *Energy Analysis and Verification by Translation to Horn Clauses and Abstract Interpretation*. Workshop on Horn Clauses for Verification and Synthesis (HCVS'2015), July 2015.
19. P. Lopez-Garcia, R. Haemmerlé, M. Klemen, U. Liqat, M.V. Hermenegildo. *Towards Energy Consumption Verification via Static Analysis*. Workshop on High Performance Energy Efficient Embedded Systems (HIP3ES), arXiv:1501.03064, 11 pages, 2015. arXiv:1512.09369.
20. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Towards Assertion-based Debugging of Higher-Order (C)LP Programs (Extended Abstract)*. Theory and Practice of Logic Programming, 30th Int'l. Conference on Logic Programming (ICLP'14) Special Issue, On-line Supplement, Vol. 14, Num. 4-5, pages 209–210, Cambridge U. Press, July 2014.
21. U. Liqat, S. Kerrison, A. Serrano, K. Georgiou, P. Lopez-Garcia, N. Grech, M.V. Hermenegildo, K. Eder. *Energy Consumption Analysis of Programs based on XMOS ISA-Level Models*. Pre-proceedings of the 23rd International Symposium on Logic-Based Program Synthesis and Transformation (LOPSTR'13), September 2013.
22. A. Serrano, P. Lopez-Garcia, M.V. Hermenegildo. *Towards an Abstract Domain for Resource Analysis of Logic Programs Using Sized Types*. 23rd Workshop on Logic-based Methods in Programming Environments (WLPE 2013), 15 pages, August 2013. CoRR abs/1308.3940.
23. P. Lopez-Garcia, L. Darmawan, F. Bueno, M.V. Hermenegildo. *Interval-based Resource Usage Verification: Formalization and Prototype*. 2nd International Workshop on Foundational and Practical Aspects of Resource Analysis (FOPARA'2011), May 2011.
24. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *The Ciao Approach to the Dynamic vs. Static Language Dilemma*. Proceedings for the International Workshop on Scripts to Programs (STOP'11), 4 pages, ACM, 2011.
25. G. Marpons, J. Mariño, M. Carro, A. Herranz, L.Å. Fredlund, J.J. Moreno-Navarro, A. Polo. *A Coding Rule Conformance Checker Integrated into GCC*. VIII Jornadas sobre Programación y Lenguajes, PROLE 2008, pages 245–249, October 2008.
26. M. Méndez-Lojo, O. Lhoták, M.V. Hermenegildo. *Efficient Set Sharing using ZBDDs*. 21st Int'l. WS on Languages and Compilers for Parallel Computing (LCPC'08), LNCS, Vol. 5335, pages 94–108, Springer-Verlag, August 2008.

27. G. Marpons-Ucero, J. Mariño, A. Herranz, L.Å. Fredlund, M. Carro, J.J. Moreno-Navarro. *Automatic Coding Rule Conformance Checking Using Logic Programs*. 17th Workshop on Logic-based methods in Programming Environments, WLPE 2007, September 2007.
28. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Zanardini. *A Generic Framework for the Cost Analysis of Java Bytecode*. Spanish Conference on Programming and Computer Languages (PROLE'07), September 2007.
29. J. Navas, M. Méndez-Lojo, M.V. Hermenegildo. *An Efficient, Context and Path Sensitive Analysis Framework for Java Programs*. 9th Workshop on Formal Techniques for Java-like Programs FTfJP 2007, 12 pages, July 2007.
30. E. Albert, P. Arenas, M. Codish, S. Genaim, G. Puebla, D. Zanardini. *Termination Analysis of Java Bytecode*. 9th International Workshop on Termination, WST'07, June 2007.
31. M. Méndez-Lojo, J. Navas, M.V. Hermenegildo. *An Efficient, Parametric Fixpoint Algorithm for Analysis of Java Bytecode*. ETAPS Workshop on Bytecode Semantics, Verification, Analysis and Transformation (BYTECODE 2007), Electronic Notes in Theoretical Computer Science, Elsevier - North Holland, March 2007.
32. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Zanardini. *Experiments in Cost Analysis of Java Bytecode*. ETAPS Workshop on Bytecode Semantics, Verification, Analysis and Transformation (BYTECODE'07), Electronic Notes in Theoretical Computer Science, Vol. 190, Issue 1, Elsevier, 2007.
33. E. Albert, P. Arenas, G. Puebla, M.V. Hermenegildo. *Generation of Reduced Certificates in Abstraction-Carrying Code*. VI Jornadas Programación y Lenguajes (PROLE'06), 10 pages, October 2006.
34. E. Albert, P. Arenas, G. Puebla. *Some Issues on Incremental Abstraction-Carrying Code*. 16th Workshop on Logic-Based Methods in Programming Environments (WLPE'06) , 15 pages, August 2006.
35. E. Albert, M. Gómez-Zamalloa, L. Hubert, G. Puebla. *Towards Verification of Java Bytecode using Tools for Logic Programming*. International Workshop on Software Verification and Validation (SVV 2006), 15 pages, August 2006.
36. E. Albert, P. Arenas, G. Puebla. *Incremental Certificates and Checkers for Abstraction-Carrying Code*. Sixth Workshop on Issues in the Theory of Security, 16 pages, March 2006.
37. E. Albert, G. Puebla, M.V. Hermenegildo. *Abstract Interpretation-based Code Certification for Pervasive Systems: Preliminary Experiments*. Workshop on Software Analysis and Development for Pervasive Systems (SONDA'04), pages 1–6, August 2004.
38. E. Albert, G. Puebla, M.V. Hermenegildo. *An Abstract Interpretation-based Approach to Mobile Code Safety*. Proc. of Compiler Optimization meets Compiler Verification (COCV'04), Electronic Notes in Theoretical Computer Science 132(1), pages 113–129, Elsevier - North Holland, April 2004.
39. M.V. Hermenegildo. *A System for Automatically Generating Documentation for (C)LP Programs*. Special Issue on Parallelism and Implementation of (C)LP Systems, Electronic Notes in Theoretical Computer Science, Vol. 30, Num. 4, March 2000.
40. M.V. Hermenegildo. *A Documentation Generator for Logic Programming Systems*. ICLP'99 Workshop on Logic Programming Environments, pages 80–97, N.M. State University, December 1999.

41. M. Carro, M.V. Hermenegildo. *Some Design Issues in the Visualization of Constraint Program Execution*. AGP'98 Joint Conference on Declarative Programming, pages 71–86, July 1998.
42. G. Puebla, F. Bueno, M.V. Hermenegildo. *A Framework for Assertion-based Debugging in Constraint Logic Programming*. Proceedings of the JICSLP'98 Workshop on Types for CLP, pages 3–15, June 1998.
43. G. Puebla, F. Bueno, M.V. Hermenegildo. *An Assertion Language for Debugging of Constraint Logic Programs*. Proceedings of the ILPS'97 Workshop on Tools and Environments for (Constraint) Logic Programming, October 1997. Available from ftp://cliplab.org/pub/papers/assert_lang_tr_discipldeliv.ps.gz as technical report CLIP2/97.1..
44. M. Carro, L. Gómez, M.V. Hermenegildo. *Implementation of an Event Driven Scheme for Visualizing Parallel Execution of Logic Programs*. JICSLP'92 Workshop on Parallel Execution, 15 pages, November 1992.
45. M. Carro, L. Gómez, M.V. Hermenegildo. *Implementation of an Event Driven Scheme for Visualizing Parallel Execution of Logic Programs*. Primer Congreso Nacional de Programación Declarativa, pages 262–278, FIM/UPM, September 1992.

Technical Reports and Manuals:

1. Daniela Ferreiro, Ignacio Casso, Pedro Lopez-Garcia, José F. Morales, Manuel V. Hermenegildo. *Checkification: A Practical Approach for Testing Static Analysis Truths*. Num. CLIP-1/2025.0, IMDEA Software Institute and Technical University of Madrid (UPM), January 2025. arXiv 2501.12093.
2. Daniel Jurjo, José F. Morales, Pedro Lopez-Garcia, Manuel V. Hermenegildo. *Abstract Environment Trimming*. Num. CLIP-2/2024.0, IMDEA Software Institute and Technical University of Madrid (UPM), May 2024.
3. D. Jurjo, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *A Methodology for Designing and Composing Abstract Domains Using Rewriting Rules*. Num. CLIP-1/2023.0, CLIP Lab, UPM and IMDEA Software Institute, August 2023.
4. L. Rustenholz. *Automated Approximate Recurrence Solving applied to Static Analysis of Energy Consumption*. CLIP Lab, IMDEA Software Institute, August 2022. Master internship report. Supervised by M.V. Hermenegildo, P. Lopez-Garcia, and J. F. Morales.
5. M.A. Sanchez-Ordaz, I. Garcia-Contreras, V. Perez-Carrasco, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *VeriFly: On-the-fly Assertion Checking via Incrementality*. Num. CLIP-1/2021.0, 21 pages, The CLIP Lab, IMDEA Software Institute and T.U. Madrid, May 2021.
6. G. Garcia-Pradales, J.F. Morales, M.V. Hermenegildo. *The Ciao Prolog Playground*. Technical University of Madrid (UPM) and IMDEA Software Institute, 2021.
7. I. Garcia-Contreras, J. F. Morales, M.V. Hermenegildo. *An Approach to Incremental and Modular Context-sensitive Analysis of Logic Programs*. Num. CLIP-2/2018.0, 28 pages, The CLIP Lab, IMDEA Software Institute and T.U. Madrid, April 2018.
8. M. Klemen, N. Stulova, P. Lopez-Garcia, J. F. Morales, M.V. Hermenegildo. *An Approach to Static Performance Guarantees for Programs with Run-time Checks*. Num. CLIP-1/2018.0, 15 pages, The CLIP Lab, IMDEA Software Institute and T.U. Madrid, April 2018.
9. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Term Hiding and its Impact on Run-time Check Simplification*. Num. CLIP-1/2017.0, 27 pages, The CLIP Lab, May 2017. CoRR abs/1705.06662 (v2) [cs.PL].

10. P. Lopez-Garcia, R. Haemmerlé, U. Liqat, M. Klemen, M.V. Hermenegildo. *Parametric Static Profiling*. Num. CLIP-2/2015.0, The CLIP Lab, April 2015.
11. N. Stulova, J. F. Morales, M.V. Hermenegildo. *An Approach to Assertion-based Debugging of Higher-Order (C)LP Programs*. Num. CLIP-1/2014.0, 25 pages, The CLIP Lab, January 2014. CoRR abs/1404.4246 [cs.PL].
12. E. Mera, T. Trigo, P. Lopez-Garcia, M.V. Hermenegildo. *An Approach to Profiling for Run-Time Checking of Computational Properties and Performance Debugging*. Num. CLIP3/2010.0, 29 pages, Technical University of Madrid (UPM), March 2010.
13. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *An Overview of Ciao and its Design Philosophy*. Num. CLIP2/2010.0, Technical University of Madrid (UPM), March 2010. Under consideration for publication in *Theory and Practice of Logic Programming (TPLP)*.
14. E. Mera, P. Lopez-Garcia, M.V. Hermenegildo. *Towards Integrating Run-Time Checking and Software Testing in a Verification Framework*. Num. CLIP1/2009.0, 19 pages, Technical University of Madrid (UPM), March 2009.
15. J. Navas, E. Mera, P. Lopez-Garcia, M.V. Hermenegildo. *Inference of User-Definable Resource Bounds Usage for Logic Programs and its Applications*. Num. CLIP5/2008.0, Technical University of Madrid (UPM), July 2008.
16. M. Méndez-Lojo, O. Lhoták, M.V. Hermenegildo. *Fast Set Sharing using ZBDDs*. University of New Mexico, June 2008.
17. M.V. Hermenegildo, E. Albert, P. Arenas, F. Bueno, M. Carro, A. Casas, P. Chico de Guzmán, J. Correas, S. Genaim, J. Lipton, Pedro Lopez-Garcia, M. Méndez, E. Mera, J. Morales, J. Navas, R. Padilla, P. Pietrzak, G. Puebla, M. Zamalloa, D. Zanardini. *Rigorous Methods for Mobile and Heterogeneous Software Systems – Second Year Report*. Num. CLIP3/2008.0, Technical University of Madrid (UPM), April 2008.
18. J. Navas, M. Méndez-Lojo, M.V. Hermenegildo. *Customizable Resource Usage Analysis for Java Bytecode*. Num. UNM TR-CS-2008-02 - CLIP1/2008.0, University of New Mexico, January 2008.
19. G. Román-Díez, G. Puebla. *Java Bytecode Timing Cost Models*. Num. CLIP12/2007.0, Technical University of Madrid, December 2007.
20. M. Méndez-Lojo, M.V. Hermenegildo. *Precise Set Sharing for Java-style Programs (and proofs)*. Num. CLIP2/2007.1, Technical University of Madrid (UPM), November 2007.
21. E. Mera, P. Lopez-Garcia, M. Carro, M.V. Hermenegildo. *Towards Execution Time Estimation in Abstract Machine-Based (Logic) Languages*. Num. CLIP8/2007.0, Technical University of Madrid (UPM), August 2007.
22. G. Marpons, J. Mariño, M. Carro, A. Herranz, J.J. Moreno-Navarro, L.Å. Fredlund. *Automatic Coding Rule Conformance Checking Using Logic Programming*. Num. CLIP6/2007.0, Technical University of Madrid (UPM), August 2007.
23. E. Albert, P. Arenas, S. Genaim, G. Puebla. *Automatic Inference of Upper Bounds for Cost Equation Systems*. Num. CLIP10/2007.0, Technical University of Madrid, July 2007.
24. M.V. Hermenegildo, E. Albert, P. Arenas, A. Beascoa, F. Bueno, D. Cabeza, M. Carro, J. Correas, A. García Pañoso, J. Lipton, P. Lopez-Garcia, E. Mera, J. Morales, C. Ochoa, G. Puebla. *Rigorous Methods for Mobile and Heterogeneous Software Systems – First Year Report*. Num. CLIP4/2007.0, Technical University of Madrid (UPM), March 2007.

25. M. Méndez-Lojo, M.V. Hermenegildo. *Precise Set Sharing and Nullity Analysis for Java-style Programs*. Num. CLIP2/2007.0, Technical University of Madrid (UPM), February 2007.
26. M. Méndez-Lojo, J. Navas, M.V. Hermenegildo. *Efficient, Parametric Analysis of Java Bytecode*. Num. CLIP9/2006.0, Technical University of Madrid (UPM), December 2006.
27. P. Pietrzak, M.V. Hermenegildo. *Improved Automatic Error Diagnosis Based on Abstract Interpretation*. Num. CLIP11/2006.0, Technical University of Madrid, September 2006.
28. E. Albert, P. Arenas, G. Puebla. *An Incremental Approach to Abstraction-Carrying Code*. Num. CLIP3/2006, 16 pages, Technical University of Madrid (UPM), March 2006.
29. F. Bueno, P. Lopez-Garcia, G. Puebla, M.V. Hermenegildo. *The Ciao Preprocessor*. Num. CLIP1/06, 99 pages, Technical University of Madrid (UPM), January 2006.
30. F. Bueno, P. Lopez-Garcia, G. Puebla, M.V. Hermenegildo. *A Tutorial on Program Development and Optimization using the Ciao Preprocessor*. Num. CLIP2/06, 55 pages, Technical University of Madrid (UPM), January 2006.
31. E. Albert, P. Arenas, G. Puebla, M.V. Hermenegildo. *Reduced Certificates for Abstraction-Carrying Code*. Num. CLIP8/2005.0, 19 pages, Technical University of Madrid (UPM), October 2005.
32. E. Albert, G. Puebla, M.V. Hermenegildo. *Abstraction-Carrying Code: A Model for Mobile Code Safety*. Num. CLIP7/2005.0, 30 pages, Technical University of Madrid, July 2005.
33. E. Albert, G. Puebla, J. Gallagher. *A Partial Deducer Assisted by Predefined Assertions and a Backwards Analyzer*. Num. CLIP1/2005.0, 9 pages, Technical University of Madrid, February 2005.
34. E. Mera. *Development of a Prolog Profiler*. Num. CLIP13/2004.1, Technical University of Madrid, September 2004.
35. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla (Eds.). *The Ciao System. Reference Manual (V1.10)*. School of Computer Science, Technical University of Madrid (UPM), June 2004. System and on-line version of the manual available at <https://ciao-lang.org>.
36. F. Bueno, P. Lopez-Garcia, G. Puebla, M.V. Hermenegildo. *The Ciao Prolog Preprocessor*. Num. CLIP1/04, 72 pages, Technical University of Madrid (UPM), January 2004.
37. F. Bueno. *CiaoPP Internals*. Num. CLIP2/04, 66 pages, Technical University of Madrid (UPM), January 2004.
38. E. Albert, G. Puebla, M.V. Hermenegildo. *An Abstract Interpretation-based Approach to Mobile Code Safety*. Num. CLIP8/2003.0, 18 pages, Technical University of Madrid, November 2003.
39. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.8)*. Num. CLIP4/2002.1, School of Computer Science, Technical University of Madrid (UPM), May 2002. System and on-line version of the manual available at <https://ciao-lang.org>.
40. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.6)*. Num. CLIP5/2000.1, School of Computer Science, Technical University of Madrid (UPM), July 2000. System and on-line version of the manual available at <https://ciao-lang.org>.

41. M.V. Hermenegildo, D. Cabeza, M. Rodriguez. *Using Ciao inside GNU Emacs*. Num. CLIP4/2000.1, 18 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), 2000.
42. M.V. Hermenegildo. *A Documentation Generator for Logic Programming Systems*. Num. CLIP10/99.0, 15 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), September 1999.
43. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.0)*. Num. CLIP11/99.1, School of Computer Science, Technical University of Madrid (UPM), June 1999. System and on-line version of the manual available at <https://ciao-lang.org>.
44. F. Bueno, P. Lopez-Garcia, G. Puebla, M.V. Hermenegildo, P. Pietrzak. *The CHIP Assertion Preprocessor*. Num. CLIP1/99.1, 50 pages, Technical University of Madrid (UPM), March 1999. Also as deliverable of the ESPRIT project DISCIPL.
45. M. Carro, M.V. Hermenegildo. *Some Issues in the Design of Visualizations for Constraint Logic Program Execution*. Num. CLIP2/99.1, 17 pages, Technical University of Madrid (UPM), March 1999. Also as deliverable of the ESPRIT project DISCIPL.
46. M.V. Hermenegildo, G. Puebla, F. Bueno. *Using Global Analysis, Partial Specifications, and an Extensible Assertion Language for Program Validation and Debugging*. Num. CLIP8/98.0, Technical University of Madrid (UPM), October 1998.
47. J.M. Ramos. *vifid: Variable Visualization for Finite Domains*. Num. CLIP4/98.0, 58 pages, Technical University of Madrid, September 1998.
48. J.M. Ramos, M. Carro. *VIFID User's Manual*. Num. CLIP3/98.0, 25 pages, Technical University of Madrid, September 1998.
49. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V0.6)*. Num. CLIP12/98.1, School of Computer Science, Technical University of Madrid (UPM), July 1998. System and on-line version of the manual available at <https://ciao-lang.org>.
50. F. Bueno. *Using Assertions for Static Debugging of CLP: A Manual*. Num. CLIP1/98.0, 15 pages, DISCIPL Project/CLIP Group, UPM, June 1998.
51. A. López, M. Carro. *A User Guide to APT*. Num. CLIP6/97.1, 12 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), September 1997.
52. M. Carro, M.V. Hermenegildo. *Some Design Issues in Constraint Program Visualization and Abstraction*. Num. CLIP1/97.1, 20 pages, Technical University of Madrid (UPM), September 1997. Also as deliverable of the ESPRIT project DISCIPL.
53. The CLIP Group. *Program Assertions*. Num. CLIP4/97.1, Facultad de Informática, UPM, August 1997.
54. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual*. Num. CLIP3/97.1, School of Computer Science, Technical University of Madrid (UPM), August 1997. System and on-line version of the manual available at <https://ciao-lang.org>.
55. M.V. Hermenegildo, The CLIP Group. *An Automatic Documentation Generator for (C)LP – Reference Manual*. Num. CLIP5/97.3, Facultad de Informática, UPM, August 1997. Online at <https://ciao-lang.org>.

56. A. Aggoun, F. Benhamou, F. Bueno, M. Carro, P. Deransart, W. Drabent, G. Ferrand, F. Goualard, M.V. Hermenegildo, C. Lai, J.Lloyd, J. Maluszynski, G. Puebla, A. Tessier. *CP Debugging Tools: Clarification of Functionalities and Selection of the Tools*. Num. D.WP1.1.M1.1-2, 15 pages, DISCIPL Project, June 1997.
57. F. Bueno, D. Cabeza, M.V. Hermenegildo, S. Prestwich, G. Puebla. *Some Improvements to an Abstract Syntax for Analysis and Optimization of Full (Parallel) Prolog*. Num. CLIP 8/94.0, Computer Science Dept., Technical U. of Madrid (UPM), September 1994.
58. F. Bueno, M. Carro, D. Cabeza, F. Ballesteros, P. Lopez-Garcia, M. García de la Banda, M.V. Hermenegildo, L. Gómez, S. Prestwich, S.-W. Yan. *A Proposal for an Interchange Abstract Syntax for (Parallel) Prolog*. Num. CLIP3/93.0, 33 pages, Computer Science Dept., Technical U. of Madrid (UPM), June 1993.
59. M. Carro, L. Gómez, M.V. Hermenegildo. *Using VisAndOr to Debug and Understand Parallel Execution of Logic Programs*. Num. CLIP 1/93.0, School of Computer Science, Technical University of Madrid, February 1993.
60. M. Carro, L. Gómez, M.V. Hermenegildo. *VISANDOR: A Tool for Visualizing And-/Or-parallelism in Logic Programs*. Num. CLIP9/91.0, 17 pages, T.U. of Madrid (UPM), June 1991.
61. M.V. Hermenegildo, R. I. Nasr. *A Tool for Visualizing Independent And-parallelism in Logic Programs*. Num. CLIP1/90.0, T.U. of Madrid (UPM), 1990. Presented at the NACL90 Workshop on Parallel Logic Programming, Austin, TX.

2 Publications in Program Analysis

Articles in Refereed Journals:

1. Daniela Ferreiro, Ignacio Casso, Pedro Lopez-Garcia, José F. Morales, Manuel V. Hermenegildo. *Checkification: A Practical Approach for Testing Static Analysis Truths*. Theory and Practice of Logic Programming, To Appear, Cambridge U. Press, May 2025.
2. Louis Rustenholz, Maximiliano Klemen, Miguel Ángel Carreira-Perpiñán, Pedro López-García. *A Machine Learning-based Approach for Solving Recurrence Relations and its use in Cost Analysis of Logic Programs*. TPLP, Vol. 24, Num. 6, pages 1163–1207, November 2024.
3. Daniel Jurjo, José F. Morales, Pedro Lopez-Garcia, Manuel V. Hermenegildo. *Abstract Environment Trimming*. Theory and Practice of Logic Programming, Vol. 24, Num. 4, pages 863–884, Cambridge U. Press, October 2024.
4. Emanuele De Angelis, Fabio Fioravanti, John P. Gallagher, Manuel V. Hermenegildo, Alberto Pettorossi, Maurizio Proietti. *Analysis and Transformation of Constrained Horn Clauses for Program Verification*. Theory and Practice of Logic Programming, Vol. 22, Num. 6, pages 1–69, Cambridge U. Press, November 2021.
5. M.A. Sanchez-Ordaz, I. Garcia-Contreras, V. Perez-Carrasco, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *VeriFly: On-the-fly Assertion Checking via Incrementality*. Theory and Practice of Logic Programming, Vol. 21, Num. 6, pages 768–784, Cambridge U. Press, September 2021.
6. I. Garcia-Contreras, J. F. Morales, M.V. Hermenegildo. *Incremental and Modular Context-sensitive Analysis*. Theory and Practice of Logic Programming, Vol. 21, Num. 2, pages 196–243, Cambridge U. Press, January 2021.
7. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Some Trade-offs in Reducing the Overhead of Assertion Run-time Checks via Static Analysis*. Science of Computer Programming, Vol. 155, pages 3–26, Elsevier North-Holland, April 2018. Selected and Extended papers from the 2016 International Symposium on Principles and Practice of Declarative Programming.
8. P. Lopez-Garcia, L. Darmawan, M. Klemen, U. Liqat, F. Bueno, M.V. Hermenegildo. *Interval-based Resource Usage Verification by Translation into Horn Clauses and an Application to Energy Consumption*. Theory and Practice of Logic Programming, Special Issue on Computational Logic for Verification, Vol. 18, Num. 2, pages 167–223, Cambridge U. Press, March 2018. arXiv:1803.04451.
9. U. Liqat, Z. Banković, P. Lopez-Garcia, M.V. Hermenegildo. *An Evolutionary Scheduling Approach for Trading-off Accuracy vs. Verifiable Energy in Multicore Processors*. Logic Journal of the IGPL, Vol. 25, Num. 6, pages 1006–1019, Oxford Academic Press, December 2017.
10. I. Garcia-Contreras, J. F. Morales, M.V. Hermenegildo. *Semantic Code Browsing*. Theory and Practice of Logic Programming, 32nd Int'l. Conference on Logic Programming (ICLP'16) Special Issue, Vol. 16, Num. 5-6, pages 721–737, Cambridge U. Press, September 2016.
11. P. Lopez-Garcia, M. Klemen, U. Liqat, M.V. Hermenegildo. *A General Framework for Static Profiling of Parametric Resource Usage*. Theory and Practice of Logic Programming, 32nd Int'l. Conference on Logic Programming (ICLP'16) Special Issue, Vol. 16, Num. 5-6, pages 849–865, Cambridge U. Press, September 2016.

12. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Practical Run-time Checking via Unobtrusive Property Caching*. Theory and Practice of Logic Programming, 31st Int'l. Conference on Logic Programming (ICLP'15) Special Issue, Vol. 15, Num. 04-05, pages 726–741, Cambridge U. Press, September 2015. <https://arxiv.org/abs/1507.05986>.
13. A. Serrano, P. Lopez-Garcia, M.V. Hermenegildo. *Resource Usage Analysis of Logic Programs via Abstract Interpretation Using Sized Types*. Theory and Practice of Logic Programming, 30th Int'l. Conference on Logic Programming (ICLP'14) Special Issue, Vol. 14, Num. 4-5, pages 739–754, Cambridge U. Press, July 2014.
14. G.J. Duck, R. Haemmerlé, M. Sulzmann. *On Termination, Confluence and Consistent CHR-based Type Inference*. Theory and Practice of Logic Programming, 30th Int'l. Conference on Logic Programming (ICLP'14) Special Issue, Vol. 14, Num. 4-5, pages 619–632, Cambridge U. Press, 2014.
15. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *An Overview of Ciao and its Design Philosophy*. Theory and Practice of Logic Programming, Vol. 12, Num. 1–2, pages 219–252, Cambridge University Press, January 2012.
16. R. Haemmerlé. *Diagrammatic confluence for Constraint Handling Rules*. Theory and Practice of Logic Programming, 28th Int'l. Conference on Logic Programming (ICLP'12) Special Issue, Vol. 12, Num. 4-5, pages 737–754, Cambridge U. Press, 2012.
17. E. Albert, P. Arenas, G. Puebla, M.V. Hermenegildo. *Certificate Size Reduction in Abstraction-Carrying Code*. Theory and Practice of Logic Programming, Vol. 12, Num. 3, pages 283–318, 2012.
18. E. Albert, P. Arenas, S. Genaim, G. Puebla. *Closed-Form Upper Bounds in Static Cost Analysis*. Journal of Automated Reasoning, Vol. 46, Num. 2, pages 161–203, Springer, February 2011.
19. M. Gómez-Zamalloa, E. Albert, G. Puebla. *Test Case Generation for Object-Oriented Imperative Languages in CLP*. Theory and Practice of Logic Programming, 26th Int'l. Conference on Logic Programming (ICLP'10) Special Issue, Vol. 10 (4–6), pages 659–674, Cambridge U. Press, July 2010.
20. A. Stivala, P. J. Stuckey, M. García de la Banda, M.V. Hermenegildo, A. Wirth. *Lock-free Parallel Dynamic Programming*. Journal of Parallel and Distributed Computing, Vol. 70, Num. 8, pages 839–848, Elsevier, 2010.
21. P. Lopez-Garcia, F. Bueno, M.V. Hermenegildo. *Automatic Inference of Determinacy and Mutual Exclusion for Logic Programs Using Mode and Type Analyses*. New Generation Computing, Vol. 28, Num. 2, pages 117–206, Ohmsha, Ltd. and Springer, 2010.
22. M. Gómez-Zamalloa, E. Albert, G. Puebla. *Decompilation of Java Bytecode to Prolog by Partial Evaluation*. Information and Software Technology, Vol. 51, Num. 10, pages 1409–1427, Elsevier, October 2009.
23. D. Cabeza, M. Hermenegildo. *Non-Strict Independence-Based Program Parallelization Using Sharing and Freeness Information*. Theoretical Computer Science, Vol. 410, Num. 46, pages 4704–4723, Elsevier Science, October 2009.
24. E. Albert, J. Gallagher, M. Gómez-Zamalloa, G. Puebla. *Type-based Homeomorphic Embedding for Online Termination*. Information Processing Letters, Vol. 109, Num. 15, pages 879–886, Elsevier, July 2009.
25. E. Albert, G. Puebla, M.V. Hermenegildo. *Abstraction-Carrying Code: A Model for Mobile Code Safety*. New Generation Computing, Vol. 26, Num. 2, pages 171–204, March 2008.

26. Samir Genaim, Andy King. *Inferring non-suspension conditions for logic programs with dynamic scheduling*. ACM Trans. Comput. Log., Vol. 9, Num. 3, 2008.
27. M. Bruynooghe, M. Codish, J. P. Gallagher, S. Genaim, W. Vanhoof. *Termination analysis of logic programs through combination of type-based norms*. ACM Transactions on Programming Languages and Systems, Vol. 29, Num. 2, 10 pages, ACM Press, 2007.
28. M.V. Hermenegildo, G. Puebla, F. Bueno, P. Lopez-Garcia. *Integrated Program Debugging, Verification, and Optimization Using Abstract Interpretation (and The Ciao System Preprocessor)*. Science of Computer Programming, Vol. 58, Num. 1–2, pages 115–140, Elsevier North-Holland, October 2005.
29. G. Gupta, E. Pontelli, K. Ali, M. Carlsson, M.V. Hermenegildo. *Parallel Execution of Prolog Programs: a Survey*. ACM Transactions on Programming Languages and Systems, Vol. 23, Num. 4, pages 472–602, ACM Press, July 2001.
30. M.V. Hermenegildo, G. Puebla, K. Marriott, P. Stuckey. *Incremental Analysis of Constraint Logic Programs*. ACM Transactions on Programming Languages and Systems, Vol. 22, Num. 2, pages 187–223, ACM Press, March 2000.
31. M. Codish, V. Lagoon, F. Bueno. *An algebraic approach to sharing analysis of logic programs*. Journal of Logic Programming, Vol. 42, Num. 2, pages 111–149, Elsevier - North Holland, February 2000.
32. G. Puebla, M.V. Hermenegildo. *Abstract Multiple Specialization and its Application to Program Parallelization*. J. of Logic Programming. Special Issue on Synthesis, Transformation and Analysis of Logic Programs, Vol. 41, Num. 2&3, pages 279–316, Elsevier - North Holland, November 1999.
33. F. Bueno, M. García de la Banda, M.V. Hermenegildo. *Effectiveness of Abstract Interpretation in Automatic Parallelization: A Case Study in Logic Programming*. ACM Transactions on Programming Languages and Systems, Vol. 21, Num. 2, pages 189–238, ACM Press, March 1999.
34. M. Codish, M. Bruynooghe, M. García de la Banda, M.V. Hermenegildo. *Exploiting Goal Independence in the Analysis of Logic Programs*. Journal of Logic Programming, Vol. 32, Num. 3, pages 247–261, Elsevier - North Holland, September 1997.
35. M. García de la Banda, M.V. Hermenegildo, M. Bruynooghe, V. Dumortier, G. Janssens, W. Simoens. *Global Analysis of Constraint Logic Programs*. ACM Transactions on Programming Languages and Systems, Vol. 18, Num. 5, pages 564–615, ACM, September 1996.
36. M. Codish, A. Mulkers, M. Bruynooghe, M. García de la Banda, M.V. Hermenegildo. *Improving Abstract Interpretations by Combining Domains*. ACM Transactions on Programming Languages and Systems, Vol. 17, Num. 1, pages 28–44, ACM, January 1995.
37. M.V. Hermenegildo, R. Warren, S. K. Debray. *Global Flow Analysis as a Practical Compilation Tool*. Journal of Logic Programming, Vol. 13, Num. 4, pages 349–367, Elsevier - North Holland, August 1992.
38. K. Muthukumar, M.V. Hermenegildo. *Compile-time Derivation of Variable Dependency Using Abstract Interpretation*. Journal of Logic Programming, Vol. 13, Num. 2/3, pages 315–347, Elsevier - North-Holland, July 1992.
39. M.V. Hermenegildo, R. Warren. *Designing a High-Performance Parallel Logic Programming System*. Computer Architecture News, Special Issue on Parallel Symbolic Programming, Vol. 15, Num. 1, pages 43–53, ACM, March 1987.

Articles in Refereed Conferences:

1. Louis Rustenholz, Pedro Lopez-Garcia, José F. Morales, Manuel V. Hermenegildo. *An Order Theory Framework of Recurrence Equations for Static Cost Analysis - Dynamic Inference of Non-Linear Inequality Invariants*. Proceedings of the 31st Static Analysis Symposium (SAS 2024), LNCS, Vol. 14995, pages 352–385, Springer, October 2024.
2. John P. Gallagher, Manuel V. Hermenegildo, José F. Morales, Pedro Lopez-Garcia. *Transforming Big-Step to Small-Step Semantics Using Interpreter Specialisation*. Proc. of the 33rd International Symposium on Logic-Based Program Synthesis and Transformation, LOPSTR 2023, Lecture Notes in Computer Science, Vol. 14330, pages 28–38, Springer, October 2023.
3. Daniel Jurjo, José F. Morales, Pedro Lopez-Garcia, Manuel V. Hermenegildo. *A Rule-Based Approach for Designing and Composing Abstract Domains*. Proc. of the 33rd International Symposium on Logic-Based Program Synthesis and Transformation, LOPSTR 2023, Lecture Notes in Computer Science, Vol. 14330, pages 80–98, Springer, October 2023.
4. Ignacio Casso, José F. Morales, Pedro López-García, Manuel V. Hermenegildo. *Testing Your (Static Analysis) Truths*. Logic-Based Program Synthesis and Transformation - 30th International Symposium, Post-Proceedings, Lecture Notes in Computer Science, Vol. 12561, pages 271–292, Springer, 2021.
5. I. Casso, J. F. Morales, P. Lopez-Garcia, R. Giacobazzi, M.V. Hermenegildo. *Computing Abstract Distances in Logic Programs*. Post-Proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), LNCS, Vol. 12042, pages 57–72, Springer-Verlag, April 2020.
6. I. Casso, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *An Integrated Approach to Assertion-Based Random Testing in Prolog*. Post-Proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), LNCS, Vol. 12042, pages 159–176, Springer-Verlag, April 2020.
7. M. Klemen, P. Lopez-Garcia, J. Gallagher, J.F. Morales, M.V. Hermenegildo. *A General Framework for Static Cost Analysis of Parallel Logic Programs*. Post-Proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), LNCS, Vol. 12042, pages 19–35, Springer-Verlag, April 2020.
8. R. Bruni, R. Giacobazzi, R. Gori, I. Garcia-Contreras, D. Pavlovic. *Abstract Extensionality – On the Properties of Incomplete Abstract Interpretations*. Proc. ACM Symposium on Principles of Programming Languages 2020, January 2020.
9. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Incremental Analysis of Logic Programs with Assertions and Open Predicates*. Proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), LNCS, Vol. 12042, pages 36–56, Springer, 2020.
10. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Multivariate Assertion-based Guidance in Abstract Interpretation*. Post-Proceedings of the 28th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'18), LNCS, Num. 11408, pages 184–201, Springer-Verlag, January 2019.
11. M. Klemen, N. Stulova, P. Lopez-Garcia, J. F. Morales, M.V. Hermenegildo. *Static Performance Guarantees for Programs with Run-time Checks*. 20th Int'l. ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming (PPDP'18), 13 pages, ACM Press, September 2018.

12. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Exploiting Term Hiding to Reduce Runtime Checking Overhead*. 20th International Symposium on Practical Aspects of Declarative Languages (PADL 2018), LNCS, Num. 10702, pages 99–115, Springer-Verlag, January 2018.
13. U. Liqat, Z. Banković, P. Lopez-Garcia, M.V. Hermenegildo. *Inferring Energy Bounds via Static Program Analysis and Evolutionary Modeling of Basic Blocks*. Logic-Based Program Synthesis and Transformation - 27th International Symposium, LOPSTR 2017, Namur, Belgium, October 10-12, 2017, Revised Selected Papers, Lecture Notes in Computer Science, Vol. 10855, Springer, 2018.
14. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Reducing the Overhead of Assertion Runtime Checks via Static Analysis*. 18th Int'l. ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming (PPDP'16), pages 90–103, ACM Press, September 2016.
15. Dragan Ivanovic, Manuel Carro. *Transforming Service Compositions into Cloud-Friendly Actor Networks*. Service-Oriented Computing - 12th International Conference, ICSOC 2014, Paris, France, November 3-6, 2014. Proceedings, LNCS, Vol. 8831, pages 291–305, Springer Verlag, November 2014.
16. Dragan Ivanović, Manuel Carro, Peerachai Kaowichakorn. *Towards QoS Prediction Based on Composition Structure Analysis and Probabilistic Models*. Service-Oriented Computing - 12th International Conference, ICSOC, LNCS, Vol. 8831, pages 394–402, Springer Verlag, November 2014.
17. U. Liqat, S. Kerrison, A. Serrano, K. Georgiou, P. Lopez-Garcia, N. Grech, M.V. Hermenegildo, K. Eder. *Energy Consumption Analysis of Programs based on X MOS ISA-Level Models*. Logic-Based Program Synthesis and Transformation, 23rd International Symposium, LOPSTR 2013, Revised Selected Papers, Lecture Notes in Computer Science, Vol. 8901, pages 72–90, Springer, 2014.
18. A. Serrano, P. Lopez-Garcia, F. Bueno, M.V. Hermenegildo. *Sized Type Analysis for Logic Programs*. Vol. 13, Num. 4-5, pages 1–14, Cambridge U. Press, August 2013.
19. D. Ivanovic, M. Carro, M.V. Hermenegildo. *A Constraint-Based Approach to Quality Assurance in Service Choreographies*. 10th International Conference on Service Oriented Computing, ICSOC'12, LNCS, Vol. 7637, Springer Verlag, November 2012.
20. E. Albert, R. Bubel, S. Genaim, R. Hähnle, G. Román-Díez. *Verified Resource Guarantees for Heap Manipulating Programs*. Proceedings of the 15th International Conference on Fundamental Approaches to Software Engineering, FASE 2012, Tallinn, Estonia, March, 2012, Lecture Notes in Computer Science, Vol. 7212, pages 130–145, Springer, March 2012.
21. E. Albert, J. Correias, G. Puebla, G. Román-Díez. *Incremental Resource Usage Analysis*. ACM SIGPLAN Workshop on Partial Evaluation and Program Manipulation (PEPM 2012), pages 25–34, ACM Press, January 2012.
22. E. Albert, P. Arenas, S. Genaim, M. Gómez-Zamalloa, G. Puebla. *COSTABS: A Cost and Termination Analyzer for ABS*. ACM SIGPLAN Workshop on Partial Evaluation and Program Manipulation (PEPM 2012), pages 151–154, ACM Press, January 2012.
23. A. M. Ben-Amram, S. Genaim, A. N. Masud. *On the Termination of Integer Loops*. Verification, Model Checking, and Abstract Interpretation - 13th International Conference, VMCAI 2012, Philadelphia, USA, January 25-27, 2012. Proceedings, Lecture Notes in Computer Science, Vol. 7148, pages 72–87, Springer, January 2012.
24. E. Albert, P. Arenas, M. Gómez-Zamalloa. *Symbolic Execution of Concurrent Objects in CLP*. Practical Aspects of Declarative Languages (PADL'12), LNCS, Vol. 7149, pages 123–137, Springer, January 2012.

25. E. Albert, M. Gómez-Zamalloa, J.M. Rojas. *Resource-driven CLP-based Test Case Generation*. Proc. of LOPSTR'11, LNCS, Vol. 7225, pages 25–41, Springer-Verlag, 2012.
26. E. Albert, J. Correas, G. Puebla, G. Román-Díez. *Towards Incremental Resource Usage Analysis*. The Ninth Asian Symposium on Programming Languages and Systems (APLAS'11), Springer, December 2011. Poster Presentation.
27. D. Ivanović, M. Carro, M.V. Hermenegildo. *Constraint-Based Runtime Prediction of SLA Violations in Service Orchestrations*. Service-Oriented Computing – ICSOC 2011, LNCS, Vol. 7084, pages 62–76, Springer Verlag, December 2011. Best paper award.
28. Elvira Albert, Israel Cabañas, Antonio Flores-Montoya, Miguel Gómez-Zamalloa, Sergio Gutiérrez. *jPET: an Automatic Test-Case Generator for Java*. 18th Working Conference on Reverse Engineering (WCRE 2011), 2 pages, IEEE Computer Society, October 2011.
29. J. F. Morales, M.V. Hermenegildo, R. Haemmerlé. *Modular Extensions for Modular (Logic) Languages*. Proceedings of the 21th International Symposium on Logic-Based Program Synthesis and Transformation (LOPSTR'11), LNCS, Vol. 7225, pages 139–154, Springer, July 2011.
30. R. Haemmerlé, P. Lopez-Garcia, M.V. Hermenegildo. *CLP Projection for Constraint Handling Rules*. Proceedings of the 13th International ACM SIGPLAN Conference on Principles and Practice of Declarative Programming, pages 137–148, ACM Press, July 2011.
31. D. Ivanović, M. Carro, M.V. Hermenegildo. *Automated Attribute Inference in Complex Service Workflows Based on Sharing Analysis*. Proceedings of the 8th IEEE Conference on Services Computing SCC 2011, pages 120–127, IEEE Press, July 2011.
32. E. Albert, S. Genaim, M. Gómez-Zamalloa, E. B. Johnsen, R. Schlatte, S. L. Tapia Tarifa. *Simulating Concurrent Behaviors with Worst-Case Cost Bounds*. 17th International Symposium on Formal Methods (FM 2011), Lecture Notes in Computer Science, Vol. 6664, pages 353–368, Springer, June 2011.
33. E. Albert, P. Arenas, S. Genaim, D. Zanardini. *Task-Level Analysis for a Language with Async-Finish Parallelism*. Proceedings of the ACM SIGPLAN/SIGBED 2011 conference on Languages, compilers, and tools for embedded systems, LCTES 2011, Chicago, IL, USA, April 11-14, 2011, pages 21–30, ACM, April 2011.
34. E. Albert, R. Bubel, S. Genaim, R. Hähnle, G. Puebla, G. Román-Díez. *Verified Resource Guarantees using COSTA and KeY*. Proceedings of the 2011 ACM SIGPLAN Workshop on Partial Evaluation and Program Manipulation, PEPM 2011, Austin, TX, USA, January 24-25, 2011, pages 73–76, ACM Press, January 2011.
35. E. Mera, T. Trigo, P. Lopez-Garcia, M.V. Hermenegildo. *Profiling for Run-Time Checking of Computational Properties and Performance Debugging in Logic Programs*. Practical Aspects of Declarative Languages (PADL'11), Lecture Notes in Computer Science, Vol. 6539, pages 38–53, Springer-Verlag, January 2011.
36. E. Albert, S. Genaim, A. N. Masud. *More Precise yet Widely Applicable Cost Analysis*. 12th Verification, Model Checking, and Abstract Interpretation (VMCAI'11), Lecture Notes in Computer Science, Vol. 6538, pages 38–53, Springer Verlag, January 2011.
37. E. Albert, P. Arenas, S. Genaim, M. Gómez-Zamalloa, G. Puebla. *Cost Analysis of Concurrent OO Programs*. The 9th Asian Symposium on Programming Languages and Systems (APLAS'11), Vol. 7078, pages 238–254, Springer, 2011.

38. D. Ramírez-Deantes, J. Correás, G. Puebla. *Modular Termination Analysis of Java Bytecode and its Application to phoneME Core Libraries*. Postproceedings of Formal Aspects of Computer Software (FACS 2010), Lecture Notes in Computer Science, Vol. 6921, pages 218–236, Springer, 2011.
39. E. Albert, M. Gómez-Zamalloa, J.M. Rojas, G. Puebla. *Compositional CLP-based Test Data Generation for Imperative Languages*. LOPSTR 2010 Revised Selected Papers, LNCS, Vol. 6564, pages 99–116, Springer-Verlag, 2011.
40. P. Lopez-Garcia, L. Darmawan, F. Bueno. *A Framework for Verification and Debugging of Resource Usage Properties: Resource Usage Verification*. Technical Communications of the 26th Int'l. Conference on Logic Programming (ICLP'10), Leibniz International Proceedings in Informatics (LIPIcs), Vol. 7, pages 104–113, Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, July 2010.
41. E. Albert, S. Genaim, M. Gómez-Zamalloa. *Parametric Inference of Memory Requirements for Garbage Collected Languages*. 9th International Symposium on Memory Management (ISMM'10), pages 121–130, ACM Press, June 2010.
42. D. Ivanović, M. Carro, M.V. Hermenegildo. *Automatic Fragment Identification in Workflows Based on Sharing Analysis*. Service-Oriented Computing – ICSOC 2010, LNCS, Vol. 6470, pages 350–364, Springer Verlag, 2010.
43. Mohamed Anis Zemni, Salima Benbernou, M. Carro. *A Soft Constraint-Based Approach to QoS-Aware Service Selection*. Service-Oriented Computing – ICSOC 2010, LNCS, Vol. 6470, pages 596–602, Springer Verlag, 2010.
44. E. Albert, M. Gómez-Zamalloa, G. Puebla. *PET: A Partial Evaluation-based Test Case Generation Tool for Java Bytecode*. ACM SIGPLAN Workshop on Partial Evaluation and Semantics-based Program Manipulation (PEPM'10), pages 25–28, ACM Press, 2010.
45. E. Albert, P. Arenas, S. Genaim, I. Herraiz, G. Puebla. *Comparing Cost Functions in Resource Analysis*. 1st International Workshop on Foundational and Practical Aspects of Resource Analysis (FOPARA'09), Lecture Notes in Computer Science, Vol. 6234, pages 1–17, Springer, 2010.
46. L. Scandolo, C. Kunz, G. Barthe, M.V. Hermenegildo. *Program Parallelization using Synchronized Pipelining*. Proceedings of the 19th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'09), LNCS, Vol. 6037, pages 173–187, Springer, 2010.
47. D. Ivanović, M. Carro, M.V. Hermenegildo. *Towards Data-Aware QoS-Driven Adaptation for Service Orchestrations*. Proceedings of the 2010 IEEE International Conference on Web Services (ICWS 2010), Miami, FL, USA, 5-10 July 2010, pages 107–114, IEEE, 2010.
48. D. Ivanović, M. Treiber, M. Carro, S. Dustdar. *Building Dynamic Models of Service Compositions With Simulation of Provision Resources*. Proceedings of the 29th International Conference on Conceptual Modeling (ER 2010), Vancouver, Canada, 1-5 November 2010, LNCS 6412, pages 344–358, Springer, 2010.
49. E. Albert, P. Arenas, D. Alonso, S. Genaim, G. Puebla. *Asymptotic Resource Usage Bounds*. The Seventh Asian Symposium on Programming Languages and Systems (APLAS'09), Lecture Notes in Computer Science, Vol. 5904, pages 294–310, Springer, December 2009.
50. E. Albert, P. Arenas, S. Genaim, M. Gómez-Zamalloa, G. Puebla, D. Ramírez, G. Román, D. Zanardini. *Termination and Cost Analysis with COSTA and its User Interfaces*. Spanish Conference on Programming and Computer Languages (PROLE'09), ENTCS, Vol. 248, pages 109–121, Elsevier, September 2009.

51. G. Marpons, J. Mariño, M. Carro, A. Herranz, L.Å. Fredlund, J.J. Moreno-Navarro, A. Polo. *A Coding Rule Conformance Checker Integrated into GCC*. Spanish Conference on Programming and Computer Languages (PROLE'09), ENTCS, Vol. 258, pages 149–159, Elsevier, August 2009.
52. E. Mera, P. Lopez-Garcia, M.V. Hermenegildo. *Integrating Software Testing and Run-Time Checking in an Assertion Verification Framework*. 25th Int'l. Conference on Logic Programming (ICLP'09), LNCS, Vol. 5649, pages 281–295, Springer-Verlag, July 2009.
53. E. Albert, S. Genaim, M. Gómez-Zamalloa. *Live Heap Space Analysis for Languages with Garbage Collection*. 8th international symposium on Memory management, pages 129–138, ACM Press, June 2009.
54. M. Marron, D. Kapur, M.V. Hermenegildo. *Identification of Logically Related Heap Regions*. ISMM'09: Proceedings of the 8th international symposium on Memory management, ACM Press, June 2009.
55. E. Albert, M. Gómez-Zamalloa, G. Puebla. *Test Data Generation of Bytecode by CLP Partial Evaluation*. 18th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'08), LNCS, Vol. 5438, pages 4–23, Springer-Verlag, March 2009.
56. E. Albert, P. Arenas, S. Genaim, G. Puebla. *Field-Sensitive Value Analysis by Field-Insensitive Analysis*. 16th International Symposium on Formal Methods (FM'09), Lecture Notes in Computer Science, Vol. 5850, pages 370–386, Springer, 2009.
57. M. Mancoppi, M. Carro, W.-J. van den Heuvel, M.P. Papazoglou. *Sound Multi-party Business Protocols for Service Networks*. Proceedings of the Sixth International Conference on Service Oriented Computing, LNCS, Vol. 5364, pages 302–316, Springer-Verlag, December 2008.
58. E. Trias, J. Navas, E. S. Ackley, S. Forrest, M.V. Hermenegildo. *Negative Ternary Set-Sharing*. International Conference on Logic Programming, ICLP, LNCS, Num. 5366, pages 301–316, Springer-Verlag, December 2008.
59. M. Marron, M. Méndez-Lojo, M.V. Hermenegildo, D. Stefanovic, D. Kapur. *Sharing Analysis of Arrays, Collections, and Recursive Structures*. ACM WS on Program Analysis for Software Tools and Engineering (PASTE'08), ACM, November 2008.
60. M. Gómez-Zamalloa, E. Albert, G. Puebla. *Modular Decompilation of Low-Level Code by Partial Evaluation*. 8th IEEE International Working Conference on Source Code Analysis and Manipulation (SCAM'08), pages 239–248, IEEE Computer Society, September 2008.
61. D. Zanardini. *The Semantics of Abstract Program Slicing*. 8th International Working Conference on Source Code Analysis and Manipulation (SCAM'08), IEEE Computer Society, September 2008.
62. M. Marron, D. Kapur, D. Stefanovic, M.V. Hermenegildo. *Identification of Heap-Carried Data Dependence Via Explicit Store Heap Models*. 21st Int'l. WS on Languages and Compilers for Parallel Computing (LCPC'08), LNCS, Springer-Verlag, August 2008.
63. E. Mera, P. Lopez-Garcia, M. Carro, M.V. Hermenegildo. *Towards Execution Time Estimation in Abstract Machine-Based Languages*. 10th Int'l. ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming (PPDP'08), pages 174–184, ACM Press, July 2008.
64. Elvira Albert, Puri Arenas, Samir Genaim, German Puebla. *Automatic Inference of Upper Bounds for Recurrence Relations in Cost Analysis*. Static Analysis, 15th International Symposium, SAS 2008, Valencia, Spain, July 15-17, 2008, Proceedings, Lecture Notes in Computer Science, Vol. 5079, pages 221–237, Springer-Verlag, July 2008.

65. E. Albert, P. Arenas, M. Codish, S. Genaim, G. Puebla, D. Zanardini. *Termination Analysis of Java Bytecode*. IFIP International Conference on Formal Methods for Open Object-based Distributed Systems (FMOODS'08), Lecture Notes in Computer Science, Vol. 5051, pages 2–18, Springer-Verlag, Berlin, June 2008.
66. M. Marron, M.V. Hermenegildo, D. Kapur, D. Stefanovic. *Efficient Context-Sensitive Shape Analysis with Graph-Based Heap Models*. International Conference on Compiler Construction (CC 2008), Lecture Notes in Computer Science, 15 pages, Springer, April 2008.
67. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Zanardini. *Removing Useless Variables in Cost Analysis of Java Bytecode*. ACM Symposium on Applied Computing (SAC) - Software Verification Track (SV08), pages 368–375, ACM Press, New York, March 2008.
68. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Zanardini. *COSTA: Design and Implementation of a Cost and Termination Analyzer for Java Bytecode*. 6th International Symposium on Formal Methods for Components and Objects (FMCO'07), Lecture Notes in Computer Science, Num. 5382, pages 113–133, Springer, February 2008.
69. E. Albert, J. Gallagher, M. Gómez-Zamalloa, G. Puebla. *Type-based Homeomorphic Embedding and its Applications to Online Partial Evaluation*. 17th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'07), LNCS, Vol. 4915, pages 23–42, Springer-Verlag, February 2008.
70. M. Méndez-Lojo, M.V. Hermenegildo. *Precise Set Sharing Analysis for Java-style Programs*. 9th International Conference on Verification, Model Checking and Abstract Interpretation (VMCAI'08), LNCS, Num. 4905, pages 172–187, Springer-Verlag, January 2008.
71. I. Mastroeni, D. Zanardini. *Data Dependencies and Program Slicing: from Syntax to Abstract Semantics*. ACM SIGPLAN Workshop on Partial Evaluation and Semantics-based Program Manipulation (PEPM), ACM Press, New York, January 2008.
72. G. Marpons, J. Mariño, M. Carro, A. Herranz, J.J. Moreno-Navarro, L.Á. Fredlund. *Automatic Coding Rule Conformance Checking Using Logic Programming*. 10th International Symposium on Practical Aspects of Declarative Languages (PADL'08), LNCS, Vol. 4902, pages 18–34, Springer Verlag, January 2008.
73. P. Pietrzak, J. Correas, G. Puebla, M.V. Hermenegildo. *A Practical Type Analysis for Verification of Modular Prolog Programs*. ACM SIGPLAN 2008 Workshop on Partial Evaluation and Program Manipulation (PEPM'08), pages 61–70, ACM Press, January 2008.
74. E. Albert, P. Arenas, S. Genaim, G. Puebla. *Cost Relation Systems: a Language-Independent Target Language for Cost Analysis*. 8th Spanish Conference on Programming and Computer Languages (PROLE'08), Electronic Notes in Theoretical Computer Science, Vol. 17615, Elsevier, 2008.
75. E. Albert, S. Genaim, M. Gómez-Zamalloa. *Heap Space Analysis for Java Bytecode*. Proceedings of the 6th International Symposium on Memory Management (ISMM'07), pages 105–116, ACM Press, October 2007.
76. D. Zanardini. *Analyzing Non-Interference with respect to Classes*. Proceedings of the Italian Conference on Theoretical Computer Science (ICTCS), World Scientific, October 2007.
77. J. Navas, E. Mera, P. Lopez-Garcia, M.V. Hermenegildo. *User-Definable Resource Bounds Analysis for Logic Programs*. 23rd International Conference on Logic Programming (ICLP'07), Lecture Notes in Computer Science, Vol. 4670, pages 348–363, Springer, September 2007. **10-year Test of Time Award.**

78. P. Pietrzak, M.V. Hermenegildo. *Automatic Binding-related Error Diagnosis in Logic Programs*. International Conference on Logic Programming (ICLP'07), LNCS, Num. 4670, pages 333–347, Springer-Verlag, September 2007.
79. M. Méndez-Lojo, J. Navas, M.V. Hermenegildo. *A Flexible (C)LP-Based Approach to the Analysis of Object-Oriented Programs*. 17th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR 2007), Lecture Notes in Computer Science, Num. 4915, pages 154–168, Springer-Verlag, August 2007.
80. A. Casas, M. Carro, M.V. Hermenegildo. *Annotation Algorithms for Unrestricted Independent And-Parallelism in Logic Programs*. 17th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'07), LNCS, Num. 4915, pages 138–153, Springer-Verlag, August 2007.
81. M. Marron, D. Stefanovic, M.V. Hermenegildo, D. Kapur. *Heap Analysis in the Presence of Collection Libraries*. ACM WS on Program Analysis for Software Tools and Engineering (PASTE'07), ACM, June 2007.
82. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Zanardini. *Cost Analysis of Java Bytecode*. 16th European Symposium on Programming, ESOP'07, Lecture Notes in Computer Science, Vol. 4421, pages 157–172, Springer, March 2007.
83. E. Albert, M. Gómez-Zamalloa, L. Hubert, G. Puebla. *Verification of Java Bytecode using Analysis and Transformation of Logic Programs*. Ninth International Symposium on Practical Aspects of Declarative Languages (PADL 2007), LNCS, Num. 4354, pages 124–139, Springer-Verlag, January 2007.
84. E. Mera, P. Lopez-Garcia, G. Puebla, M. Carro, M.V. Hermenegildo. *Combining Static Analysis and Profiling for Estimating Execution Times*. Ninth International Symposium on Practical Aspects of Declarative Languages (PADL'07), LNCS, Num. 4354, pages 140–154, Springer-Verlag, January 2007.
85. C. Ochoa, G. Puebla. *Poly-Controlled Partial Evaluation in Practice*. ACM Partial Evaluation and Program Manipulation (PEPM'07), pages 164–173, ACM Press, January 2007.
86. E. Albert, P. Arenas, G. Puebla. *An Incremental Approach to Abstraction-Carrying Code*. 13th International Conference on Logic for Programming, Artificial Intelligence, and Reasoning (LPAR'06), LNCS, Num. 4246, pages 377–391, Springer-Verlag, November 2006.
87. P. Pietrzak, J. Correas, G. Puebla, M.V. Hermenegildo. *Context-Sensitive Multivariant Assertion Checking in Modular Programs*. 13th International Conference on Logic for Programming Artificial Intelligence and Reasoning (LPAR'06), LNCS, Num. 4246, pages 392–406, Springer-Verlag, November 2006.
88. M. Marron, D. Kapur, D. Stefanovic, M.V. Hermenegildo. *A Static Heap Analysis for Shape and Connectivity*. Languages and Compilers for Parallel Computing (LCPC'06), Lecture Notes in Computer Science, Vol. 4382, pages 345–363, Springer, November 2006.
89. H. Soza, M. Carro, P. Lopez-Garcia. *Probabilistic Cost Analysis of Logic Programs: A First Case Study*. XXXII Latin-American Conference on Informatics, August 2006.
90. E. Mera, P. Lopez-Garcia, G. Puebla, M. Carro, M.V. Hermenegildo. *Using Combined Static Analysis and Profiling for Logic Program Execution Time Estimation*. 22nd International Conference on Logic Programming (ICLP'06), LNCS, Num. 4079, pages 431–432, Springer-Verlag, August 2006.
91. G. Puebla, E. Albert, M.V. Hermenegildo. *Abstract Interpretation with Specialized Definitions*. The 13th International Static Analysis Symposium (SAS'06), LNCS, Num. 4134, pages 107–126, Springer, August 2006.

92. E. Albert, P. Arenas, G. Puebla, M.V. Hermenegildo. *Reduced Certificates for Abstraction-Carrying Code*. 22nd International Conference on Logic Programming (ICLP 2006), LNCS, Num. 4079, pages 163–178, Springer-Verlag, August 2006.
93. C. Ochoa, G. Puebla, M.V. Hermenegildo. *Removing Superfluous Versions in Polyvariant Specialization of Prolog Programs*. 15th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'05), LNCS, Num. 3901, pages 80–97, Springer-Verlag, April 2006.
94. E. Albert, G. Puebla, J. Gallagher. *Non-Leftmost Unfolding in Partial Evaluation of Logic Programs with Impure Predicates*. 15th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'05), LNCS, Num. 3901, pages 115–132, Springer-Verlag, April 2006.
95. J. Gallagher, G. Puebla, E. Albert. *Converting one Type-Based Abstract Domain to Another*. 15th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'05), LNCS, Num. 3901, pages 147–162, Springer-Verlag, April 2006.
96. J. Correias, G. Puebla, M.V. Hermenegildo, F. Bueno. *Experiments in Context-Sensitive Analysis of Modular Programs*. 15th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'05), LNCS, Num. 3901, pages 163–178, Springer-Verlag, April 2006.
97. D. Zanardini. *Abstract Non-Interference in a fragment of Java bytecode*. ACM Symposium on Applied Computing (SAC), ACM Press, New York, April 2006.
98. J. Navas, F. Bueno, M.V. Hermenegildo. *Efficient Top-Down Set-Sharing Analysis Using Cliques*. 8th International Symposium on Practical Aspects of Declarative Languages (PADL'06), LNCS, Num. 2819, pages 183–198, Springer-Verlag, January 2006.
99. Andy King, Lunjin Lu, Samir Genaim. *Detecting Determinacy in Prolog Programs*. Logic Programming, 22nd International Conference, ICLP 2006, Seattle, WA, USA, August 17-20, 2006, Proceedings, Lecture Notes in Computer Science, Vol. 4079, pages 132–147, Springer, 2006.
100. G. Puebla, C. Ochoa. *Poly-Controlled Partial Evaluation*. 8th ACM-SIGPLAN International Symposium on Principles and Practice of Declarative Programming (PPDP'06), ACM Press, 2006.
101. G. Puebla, E. Albert, M.V. Hermenegildo. *A Generic Framework for the Analysis and Specialization of Logic Programs*. International Conference on Logic Programming (ICLP 2005), LNCS, Num. 3668, pages 407–409, Springer, October 2005. Extended Abstract.
102. P. Lopez-Garcia, F. Bueno, M.V. Hermenegildo. *Determinacy Analysis for Logic Programs Using Mode and Type Information*. Proceedings of the 14th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'04), LNCS, Num. 3573, pages 19–35, Springer-Verlag, August 2005.
103. D. Zanardini. *Higher-Order Abstract Non-Interference*. Int. Conf. on Typed Lambda Calculi and Applications (TLCA), Lecture Notes in Computer Science, Vol. 3461, Springer-Verlag, Berlin, April 2005.
104. E. Albert, G. Puebla, M.V. Hermenegildo. *Abstraction-Carrying Code*. 11th International Conference on Logic for Programming Artificial Intelligence and Reasoning (LPAR 2004), LNAI, Num. 3452, pages 380–397, Springer-Verlag, March 2005.

105. E. Albert, G. Puebla, M.V. Hermenegildo. *Experiments in Abstract Interpretation-based Code Certification for Pervasive Systems*. Proc. of 2004 IEEE Conference on Systems, Man & Cybernetics (Special Session on Correctness and Reliability for Pervasive/Ubiquitous Computing), 6 pages, IEEE, October 2004.
106. E. Albert, G. Puebla, M.V. Hermenegildo. *Abstract Interpretation-based Mobile Code Certification*. Proc. of International Conference on Logic Programming (ICLP'04), LNCS, Num. 3132, pages 446–447, Springer-Verlag, September 2004. Extended Abstract.
107. F. Bueno, P. Lopez-Garcia, M.V. Hermenegildo. *Multivariant Non-Failure Analysis via Standard Abstract Interpretation*. 7th International Symposium on Functional and Logic Programming (FLOPS 2004), LNCS, Num. 2998, pages 100–116, Springer-Verlag, April 2004.
108. F. Bueno, M. García de la Banda. *Set-Sharing is not always redundant for Pair-Sharing*. 7th International Symposium on Functional and Logic Programming (FLOPS 2004), LNCS, Num. 2998, 15 pages, Springer-Verlag, April 2004.
109. C. Vaucheret, F. Bueno. *More Precise yet Efficient Type Inference for Logic Programs*. 9th International Static Analysis Symposium (SAS'02), Lecture Notes in Computer Science, Vol. 2477, pages 102–116, Springer-Verlag, September 2002.
110. J. Gallagher, G. Puebla. *Abstract Interpretation over Non-Deterministic Finite Tree Automata for Set-Based Analysis of Logic Programs*. Fourth International Symposium on Practical Aspects of Declarative Languages, LNCS, Num. 2257, pages 243–261, Springer-Verlag, January 2002.
111. S. Muñoz, J.J. Moreno-Navarro, M.V. Hermenegildo. *Efficient Negation Using Abstract Interpretation*. Proc. of the Eighth International Conference on Logic Programming and Automated Reasoning, LNAI, 15 pages, Springer-Verlag, December 2001.
112. F. Bueno, M. García de la Banda, M.V. Hermenegildo, K. Marriott, G. Puebla, P. Stuckey. *A Model for Inter-module Analysis and Optimizing Compilation*. Logic-based Program Synthesis and Transformation, LNCS, Num. 2042, pages 86–102, Springer-Verlag, March 2001.
113. C. Carreras, M.V. Hermenegildo. *Grid-based Histogram Arithmetic for the Probabilistic Analysis of Functions*. Symposium on Abstraction, Reformulation and Approximation (SARA-2000), LNAI, Springer-Verlag, July 2000.
114. D. Cabeza, M.V. Hermenegildo. *A New Module System for Prolog*. International Conference on Computational Logic, CL2000, LNAI, Num. 1861, pages 131–148, Springer-Verlag, July 2000.
115. G. Puebla, F. Bueno, M.V. Hermenegildo. *Combined Static and Dynamic Assertion-Based Debugging of Constraint Logic Programs*. Logic-based Program Synthesis and Transformation (LOPSTR'99), LNCS, Num. 1817, pages 273–292, Springer-Verlag, March 2000.
116. G. Puebla, F. Bueno, M.V. Hermenegildo. *A Framework for Assertion-based Debugging in Constraint Logic Programming (abstract)*. Proceedings of the International Conference on Principles and Practice of Constraint Programming (CP'98), LNCS, Num. 1520, pages 472–473, Springer-Verlag, October 1998.
117. S. K. Debray, P. Lopez-Garcia, M.V. Hermenegildo, N.-W. Lin. *Lower Bound Cost Estimation for Logic Programs*. 1997 International Logic Programming Symposium, pages 291–305, MIT Press, Cambridge, MA, October 1997.
118. S.K. Debray, P. Lopez-Garcia, M.V. Hermenegildo. *Non-Failure Analysis for Logic Programs*. 1997 International Conference on Logic Programming, pages 48–62, MIT Press, Cambridge, MA, June 1997.

119. G. Puebla, M. García de la Banda, K. Marriott, P. Stuckey. *Optimization of Logic Programs with Dynamic Scheduling*. 1997 International Conference on Logic Programming, pages 93–107, MIT Press, June 1997.
120. G. Puebla, M.V. Hermenegildo. *Abstract Specialization and its Application to Program Parallelization*. Logic Program Synthesis and Transformation, LNCS, Num. 1207, pages 169–186, Springer-Verlag, 1997.
121. M. Codish, V. Lagoon, F. Bueno. *An algebraic approach to sharing analysis of logic programs*. Proc. of the Fourth International Static Analysis Symposium, LNCS, Num. 1302, pages 68–82, Springer Verlag, 1997.
122. G. Puebla, M.V. Hermenegildo. *Optimized Algorithms for the Incremental Analysis of Logic Programs*. International Static Analysis Symposium (SAS 1996), Lecture Notes in Computer Science, Num. 1145, pages 270–284, Springer-Verlag, September 1996.
123. G. Puebla, M.V. Hermenegildo. *Automatic Optimization of Dynamic Scheduling in Logic Programs*. Programming Languages: Implementation, Logics, and Programs, LNCS, Num. 1140, pages 475–476, Springer-Verlag, September 1996. Poster abstract.
124. F. Bueno, D. Cabeza, M.V. Hermenegildo, G. Puebla. *Global Analysis of Standard Prolog Programs*. European Symposium on Programming, LNCS, Num. 1058, pages 108–124, Springer-Verlag, April 1996.
125. M. García de la Banda, K. Marriott, P. Stuckey. *Efficient Analysis of Constraint Logic Programs with Dynamic Scheduling*. 1995 International Logic Programming Symposium, pages 417–431, MIT Press, Cambridge, MA, December 1995.
126. M.V. Hermenegildo, G. Puebla, K. Marriott, P. Stuckey. *Incremental Analysis of Logic Programs*. International Conference on Logic Programming, pages 797–811, MIT Press, June 1995.
127. G. Puebla, M.V. Hermenegildo. *Implementation of Multiple Specialization in Logic Programs*. Proc. ACM SIGPLAN Symposium on Partial Evaluation and Semantics Based Program Manipulation, pages 77–87, ACM Press, June 1995.
128. F. Bueno, M. García de la Banda, M.V. Hermenegildo. *Effectiveness of Global Analysis in Strict Independence-Based Automatic Program Parallelization*. International Symposium on Logic Programming, pages 320–336, MIT Press, November 1994.
129. D. Cabeza, M.V. Hermenegildo. *Extracting Non-Strict Independent And-Parallelism Using Sharing and Freeness Information*. 1994 International Static Analysis Symposium, LNCS, Num. 864, pages 297–313, Springer-Verlag, September 1994.
130. M. Codish, M. García de la Banda, M. Bruynooghe, M.V. Hermenegildo. *Goal Dependent vs Goal Independent Analysis of Logic Programs*. Fifth International Conference on Logic Programming and Automated Reasoning, LNAI, Num. 822, pages 305–320, Springer-Verlag, July 1994.
131. U. Montanari, F. Rossi, F. Bueno, M. García de la Banda, M.V. Hermenegildo. *Towards a Concurrent Semantics-based Analysis of CC and CLP*. Principles and Practice of Constraint Programming, LNCS, Num. 874, pages 151–161, Springer-Verlag, May 1994.
132. M.V. Hermenegildo, The CLIP Group. *Some Methodological Issues in the Design of CIAO - A Generic, Parallel, Concurrent Constraint System*. Principles and Practice of Constraint Programming, LNCS, Num. 874, pages 123–133, Springer-Verlag, May 1994.

133. K. Marriott, M. García de la Banda, M.V. Hermenegildo. *Analyzing Logic Programs with Dynamic Scheduling*. 20th. Annual ACM Conf. on Principles of Programming Languages, pages 240–254, ACM, January 1994.
134. M. García de la Banda, M.V. Hermenegildo. *A Practical Approach to the Global Analysis of Constraint Logic Programs*. 1993 International Logic Programming Symposium, pages 437–455, MIT Press, October 1993.
135. M. Codish, A. Mulkers, M. Bruynooghe, M. García de la Banda, M.V. Hermenegildo. *Improving Abstract Interpretations by Combining Domains*. Proc. ACM SIGPLAN Symposium on Partial Evaluation and Semantics Based Program Manipulation, pages 194–206, ACM, June 1993.
136. K. Muthukumar, M.V. Hermenegildo. *Combined Determination of Sharing and Freeness of Program Variables Through Abstract Interpretation*. International Conference on Logic Programming (ICLP 1991), pages 49–63, MIT Press, June 1991.
137. S. K. Debray, N.-W. Lin, M.V. Hermenegildo. *Task Granularity Analysis in Logic Programs*. Proc. 1990 ACM Conf. on Programming Language Design and Implementation (PLDI), pages 174–188, ACM Press, June 1990.
138. K. Muthukumar, M.V. Hermenegildo. *Determination of Variable Dependence Information at Compile-Time Through Abstract Interpretation*. 1989 North American Conference on Logic Programming, pages 166–189, MIT Press, October 1989.
139. K. Muthukumar, M.V. Hermenegildo. *Complete and Efficient Methods for Supporting Side Effects in Independent/Restricted And-parallelism*. 1989 International Conference on Logic Programming, pages 80–101, MIT Press, June 1989.
140. R. Warren, M.V. Hermenegildo, S. K. Debray. *On the Practicality of Global Flow Analysis of Logic Programs*. Fifth International Conference and Symposium on Logic Programming, pages 684–699, MIT Press, August 1988.

Books and Monographs:

1. Ciccalè Baztán, Marco. *Improvements in Ciao Prolog’s Development Environment: Developing A Rich Development Environment for Ciao on Visual Studio Code*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 74 pages, June 2024. BSc Thesis.
2. M.V. Hermenegildo, J.F. Morales. *Static Analysis – 30th. International Symposium*. LNCS, Num. 14284, 566 pages, Springer, October 2023. SAS-2023 site.
3. Ferreiro de Aguiar, Daniela. *A System for generating interactive tutorials for CiaoPP*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 57 pages, February 2023. MSc Thesis.
4. Ferreiro de Aguiar, Daniela. *Automatic Analysis of Code Examples*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 66 pages, July 2021. BSc Thesis.
5. I. Garcia-Contreras. *A Scalable Static Analysis Framework for Reliable Program Development Exploiting Incrementality and Modularity*. Ph.D. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 42 pages, July 2021. Advisors: M.V. Hermenegildo and Jose F. Morales.
6. Casso, Ignacio. *An Integrated Approach to Assertion-Based Random Testing in Logic Languages*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 42 pages, July 2021. MSc Thesis.

7. Jurjo Rivas, Daniel. *Abstract Domain for Floating-point Programs*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 58 pages, July 2021. MSc Thesis.
8. Pérez Carrasco, Víctor. *Improvements to Parametric Cost Analysis and its Application to Smart Contracts*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 63 pages, July 2021. MSc Thesis.
9. Maximiliano Klemen. *A General Framework for Static Resource Analysis and Profiling of (Parallel) Programs and an Application to Runtime Checking*. Ph.D. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, March 2021.
10. Pérez Carrasco, Víctor. *Analysis of Smart Contracts using Horn Clauses*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 76 pages, June 2020. BSc Thesis.
11. Umer Liqat. *A Multi-Language and Multi-Platform Framework for Resource Consumption Analysis and its Application to Energy-Efficient Software Development*. Ph.D. Thesis, Escuela Técnica Superior de Ingenieros Informáticos, UPM, July 2018.
12. Casso, Ignacio. *Towards Computing Distances Among Abstract Interpretations*. Ms. Thesis, Universidad Complutense de Madrid, 60 pages, June 2018. BSc Thesis.
13. Isabel Garcia-Contreras. *Code Search: A Semantic, Abstract Interpretation-Based Approach*. Ms. Thesis, Technical University of Madrid, School of Computer Science, E-28660, Boadilla del Monte, Madrid, Spain, 103 pages, July 2016.
14. M. Klemen. *Improved Static Analysis and Verification of Energy Consumption and other Resources via Abstract Interpretation*. Ms. Thesis, Technical University of Madrid, ETSI Informatica, E-28660, Boadilla del Monte, Madrid, Spain, 88 pages, July 2015.
15. E. Mera. *A Unified Framework for Resource and Execution Time Analysis, Run-Time Checking and Unit-Testing*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informática UPM, 28660-Boadilla del Monte, Madrid-Spain, November 2010.
16. M. Gómez-Zamalloa. *Transformation and Analysis of Object-Oriented Bytecode*. Ph.D. Thesis, Complutense University of Madrid, October 2009.
17. E. Albert, S. Genaim. *Proceedings of the Workshop on Bytecode Semantics, Verification, Analysis and Transformation*. Electronic Notes in Theoretical Computer Science, Vol. 253, Num. 5, pages 1–2, Elsevier - North Holland, March 2009.
18. M. Méndez-Lojo. *A Generic Approach to Bytecode Analysis*. Ph.D. Thesis, University of New Mexico (UNM), Department of Computer Science, University of New Mexico, Albuquerque, NM 87131-0001 (USA), August 2008.
19. J. Navas. *Analysis and Inference of Resource Usage Information*. Ph.D. Thesis, University of New Mexico (UNM), Department of Computer Science, University of New Mexico, Albuquerque, NM 87131-0001 (USA), August 2008.
20. J. Correas. *Analysis and Verification of Modular Programs*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informática UPM, 28660-Boadilla del Monte, Madrid-Spain, June 2008.
21. D. Cabeza. *An Extensible, Global Analysis Friendly Logic Programming System*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informatica UPM, 28660-Boadilla del Monte, Madrid-Spain, August 2004.

22. Alberto Díez Zurdo. *Goal Reordering in Logic Programs with Unrestricted Parallelism and Explicit Dependencies*. Ms. Thesis, School of Computer Science, Technical University of Madrid, September 2002. In Spanish.
23. Alberto Díez Zurdo. *Paralelización Automática de Programas Lógicos en Tiempo de Compilación con Dependencias Explícitas*. Ms. Thesis, Universidad Politécnica de Madrid (UPM), Facultad de Informática, Madrid, 28660, September 2002. In Spanish.
24. M.V. Hermenegildo, G. Puebla. *Static Analysis – 9th. International Symposium*. LNCS, Num. 2477, 528 pages, Springer-Verlag, September 2002.
25. P. Deransart, M.V. Hermenegildo, J. Maluszynski. *Analysis and Visualization Tools for Constraint Programming*. LNCS, Num. 1870, 350 pages, Springer-Verlag, September 2000.
26. P. Lopez-Garcia. *Non-failure Analysis and Granularity Control in Parallel Execution of Logic Programs*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informatica UPM, 28660-Boadilla del Monte, Madrid-Spain, June 2000.
27. G. Puebla. *Advanced Compilation Techniques based on Abstract Interpretation and Program Transformation*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informatica UPM, 28660-Boadilla del Monte, Madrid-Spain, November 1997.
28. F. Bueno Carrillo. *Automatic Optimisation and Parallelisation of Logic Programs through Program Transformation*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), October 1994.
29. M. García de la Banda. *Independence, Global Analysis, and Parallelism in Dynamically Scheduled Constraint Logic Programming*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informatica UPM, 28660-Boadilla del Monte, Madrid-Spain, September 1994.
30. G. Puebla. *Simplification and Specialization of Logic Programs based on Abstract Interpretation*. Ms. Thesis, School of Computer Science. Technical University of Madrid, January 1994. (in Spanish).
31. D. Cabeza Gras. *Parallelization of Prolog Programs Using the Notion of Non-Strict Independence*. Ms. Thesis, T. University of Madrid (UPM), Facultad de Informática, Madrid, 28660, December 1993.
32. F. Bueno Carrillo. *Traducción Automática de Prolog al Andorra Kernel Language (Automatic Translation from Prolog to the Andorra Kernel Language)*. Ms. Thesis, T.U. of Madrid (UPM), Facultad de Informática, Madrid, 28660, December 1991.
33. M. García de la Banda. *Implementación de un Intérprete Abstracto de Programas Prolog sobre el Dominio “sharing + freeness” (Implementation and Evaluation of an Abstract Interpreter over the “sharing + freeness” Domain)*. Ms. Thesis, T. University of Madrid (UPM), Facultad de Informática, Madrid, 28660, December 1991.

Invited Papers and Tutorials:

1. M.V. Hermenegildo, I. Garcia-Contreras, J.F. Morales, P. Lopez-Garcia, L. Rustenholz, D. Ferreira, D. Jurjo. *On-the-fly Verification via (Incremental, Interactive) Abstract Interpretation with CiaoPP and Verify*. October 2023. Keynote at LOPSTR’23/SPLASH’23. Video available [here](#).
2. M.V. Hermenegildo. *50-Years of Prolog and Beyond (invited talk)*. November 2022. Keynote given at the Prolog 50th Anniversary ‘Prolog Day Symposium’.

3. M.V. Hermenegildo. *Some reflections on Prolog's evolution, status, and future on the 50th anniversary of the birth of Prolog (abstract of invited talk)*. 38th International Conference on Logic Programming (ICLP'22 at FLoC'22), August 2022.
4. M.V. Hermenegildo, P. Lopez-Garcia, J.F. Morales, V. Perez-Carrasco. *Analysis and Verification of the Resource Consumption of Tezos Contracts*. March 2022. Nomadic Labs Research Seminars #28.
5. V. Perez-Carrasco, M. Klemen, P. Lopez-Garcia, J.F. Morales, M.V. Hermenegildo. *Cost Analysis of Smart Contracts via Parametric Resource Analysis*. Proceedings of the 27th Static Analysis Symposium (SAS 2020), LNCS, Vol. 12389, pages 7–31, Springer, November 2020. Keynote at SAS'2020. Video available at SPLASH site.
6. J. Gallagher, M.V. Hermenegildo, B. Kafle, M. Klemen, P. Lopez-Garcia, J.F. Morales. *From big-step to small-step semantics and back with interpreter specialization (invited paper)*. Proceedings of the Eighth International Workshop on Verification and Program Transformation (VPT 2020), Electronic Proceedings in Theoretical Computer Science (EPTCS), pages 50–65, Open Publishing Association (OPA), September 2020. Co-located with ETAPS 2020.
7. M.V. Hermenegildo, I. Garcia-Contreras, J. Morales, P. Lopez-Garcia, M. Klemen, I. Casso. *Multivariant Assertion-based Guidance of Top-down Horn Clause-based Analysis in CiaoPP*. Workshop on Declarative Program Analysis (DPA 2019), 1 pages, July 2019. (Abstract of invited talk). Associated to FCRC 2019.
8. M.V. Hermenegildo, M. Carro, P. Lopez-Garcia, J.F. Morales, J. Arias, I. Garcia-Contreras, M. Klemen, N. Stulova. *25 Years of Ciao (abstract of invited tutorial)*. Pre-proceedings of the 28th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'18), September 2018. Talk slides at https://cliplab.org/papers/ciao_tut_lopstr18.pdf.
9. M.V. Hermenegildo, P. Lopez-Garcia, J. Morales, I. Garcia-Contreras, M. Klemen, N. Stulova. *Horn Clause-based Program Analysis and Verification with CiaoPP*. 1st International Workshop on Declarative Program Analysis (DPA 2018), 1 pages, July 2018. (Abstract of invited talk). Associated to ECOOP/ISSTA 2018.
10. M.V. Hermenegildo, P. Lopez-Garcia, U. Liqat, M. Klemen. *Energy Consumption Analysis and Verification by Transformation into Horn Clauses and Abstract Interpretation*. 5th International Workshop on Verification and Program Transformation (VPT 2017), Vol. 253, pages 4–6, EPTCS, April 2017. (Abstract of invited talk).
11. D. Ivanović, M. Carro, M.V. Hermenegildo. *Constraint-Based Runtime Prediction of SLA Violations in Service Orchestrations*. 22nd Workshop on Logic-based Methods in Programming Environments, 1 pages, September 2012. (abstract of invited talk).
12. E. Albert, P. Arenas, S. Genaim, M. Gómez-Zamalloa, G. Puebla. *Automatic Inference of Resource Consumption Bounds*. 18th International Conference on Logic for Programming, Artificial Intelligence, and Reasoning (LPAR-18), Lecture Notes in Computer Science, Vol. 7180, pages 1–11, Springer, March 2012.
13. Elvira Albert. *From Termination to Cost (in Object-Oriented Languages)*. Workshop on Termination (WST'10), 1 pages, July 2010.
14. Elvira Albert. *Upper Bounds on Memory Usage for Garbage-Collected Languages*. Workshop on Quantitative Analysis of Software (QA'09), 1 pages, June 2009.
15. G. Barthe, L. Beringer, P. Crégut, B. Grégoire, M. Hofmann, P. Müller, E. Poll, G. Puebla, I. Stark, E. Vétillard. *MOBIUS: Mobility, Ubiquity, Security: Objectives and progress report*. Trustworthy Global Computing'06, LNCS, Num. 4661, pages 10–29, Springer, March 2007.

16. The Ciao Development Team. *The Ciao Multiparadigm Language and Program Development Environment*. 6 pages, November 2006. The ALP Newsletter 19(3). The Association for Logic Programming..
17. G. Puebla, E. Albert, P. Arenas, M.V. Hermenegildo. *On Abstraction-Carrying Code and Certificate-Size Reduction*. 1st International Workshop on Emerging Applications of Abstract Interpretation (EAAI 2006), 15 pages, March 2006.
18. G. Puebla, E. Albert, M.V. Hermenegildo. *Abstract Interpretation-based Verification/Certification in the CiaoPP System*. Mobile Code Safety and Program Verification Using Computational Logic Tools (MoveLog'05), 9 pages, October 2005.
19. M.V. Hermenegildo, E. Albert, P. Lopez-Garcia, G. Puebla. *Abstraction Carrying Code and Resource-Awareness*. 7th ACM-SIGPLAN International Symposium on Principles and Practice of Declarative Programming (PPDP'05), pages 1–11, ACM Press, July 2005.
20. M.V. Hermenegildo, E. Albert, P. Lopez-Garcia, G. Puebla. *Some Techniques for Automated, Resource-Aware Distributed and Mobile Computing in a Multi-Paradigm Programming System*. Proc. of EURO-PAR 2004, LNCS, Num. 3149, pages 21–37, Springer-Verlag, August 2004.
21. G. Puebla, M.V. Hermenegildo. *Abstract Specialization and its Applications*. ACM Partial Evaluation and Semantics based Program Manipulation (PEPM'03), pages 29–43, ACM Press, June 2003. Invited talk.
22. M.V. Hermenegildo, G. Puebla, F. Bueno, P. Lopez-Garcia. *Program Development Using Abstract Interpretation (and The Ciao System Preprocessor)*. 10th International Static Analysis Symposium (SAS'03), LNCS, Num. 2694, pages 127–152, Springer-Verlag, June 2003.
23. M.V. Hermenegildo, G. Puebla, F. Bueno, P. Lopez-Garcia. *Abstract Verification and Debugging of Constraint Logic Programs*. Recent Advances in Constraints, LNCS, Num. 2627, pages 1–14, Springer-Verlag, January 2003.
24. M.V. Hermenegildo, F. Bueno, G. Puebla, P. Lopez-Garcia. *Program Debugging and Validation Using Semantic Approximations and Partial Specifications*. 29 th. International Colloquium on Automata, Languages, and Programming (ICALP), LNCS, Num. 2380, pages 69–72, Springer-Verlag, July 2002.
25. M.V. Hermenegildo, F. Bueno, G. Puebla, P. Lopez-Garcia. *Program Analysis, Debugging and Optimization Using the Ciao System Preprocessor*. 1999 Int'l. Conference on Logic Programming, pages 52–66, MIT Press, November 1999.
26. M.V. Hermenegildo, The CLIP Group. *Programming with Global Analysis*. Proceedings of ILPS'97, pages 49–52, MIT Press, October 1997. (abstract of invited talk).
27. F. Bueno, P. Deransart, W. Drabent, G. Ferrand, M.V. Hermenegildo, J. Maluszynski, G. Puebla. *On the Role of Semantic Approximations in Validation and Diagnosis of Constraint Logic Programs*. Proc. of the 3rd Int'l. Workshop on Automated Debugging-AADEBUG'97, pages 155–170, U. of Linköping Press, May 1997.
28. S.K. Debray, P. Lopez-Garcia, M.V. Hermenegildo, N.-W. Lin. *Estimating the Computational Cost of Logic Programs*. Static Analysis Symposium, SAS'94, LNCS, Num. 864, pages 255–265, Springer-Verlag, September 1994.
29. M. García de la Banda, M.V. Hermenegildo. *A Practical Application of Sharing and Freeness Inference*. 1992 Workshop on Static Analysis WSA'92, BIGRE, Num. 81–82, pages 118–125, IRISA-Beaulieu, September 1992.

Articles in Books and Other Collections:

1. P. Lopez-Garcia, M.V. Hermenegildo, M. Klemen, U. Liqat. *Energy Consumption Analysis and Verification using CiaoPP*. The ALP Newsletter, Vol. 30, Num. 3, The Association for Logic Programming, September 2017.
2. K. Georgiou, U. Liqat. *Towards LLVM-Based Energy Consumption Analysis of Programs*. ICT-Energy (Nanoenergy) Letters, Num. 8, pages 16–17, July 2014.
3. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Zanardini. *Resource Usage Analysis and its Application to Resource Certification*. 9th International School on Foundations of Security Analysis and Design (FOSAD'09), Lecture Notes in Computer Science, Num. 5705, pages 258–288, Springer, 2009.
4. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, J.F. Morales, G. Puebla. *An Overview of The Ciao Multiparadigm Language and Program Development Environment and its Design Philosophy*. Festschrift for Ugo Montanari, LNCS, Vol. 5065, pages 209–237, Springer-Verlag, June 2008.
5. G. Puebla, J. Correas, M.V. Hermenegildo, F. Bueno, M. García de la Banda, K. Marriott, P. J. Stuckey. *A Generic Framework for Context-Sensitive Analysis of Modular Programs*. Program Development in Computational Logic, A Decade of Research Advances in Logic-Based Program Development, LNCS, Num. 3049, pages 234–261, Springer-Verlag, August 2004.
6. G. Puebla, F. Bueno, M.V. Hermenegildo. *A Generic Preprocessor for Program Validation and Debugging*. Analysis and Visualization Tools for Constraint Programming, LNCS, Num. 1870, pages 63–107, Springer-Verlag, September 2000.
7. G. Puebla, F. Bueno, M.V. Hermenegildo. *An Assertion Language for Constraint Logic Programs*. Analysis and Visualization Tools for Constraint Programming, LNCS, Num. 1870, pages 23–61, Springer-Verlag, September 2000.
8. M.V. Hermenegildo, G. Puebla, F. Bueno. *Using Global Analysis, Partial Specifications, and an Extensible Assertion Language for Program Validation and Debugging*. The Logic Programming Paradigm: a 25-Year Perspective, pages 161–192, Springer-Verlag, July 1999.
9. M.V. Hermenegildo, F. Bueno, D. Cabeza, M. Carro, M. García de la Banda, P. Lopez-Garcia, G. Puebla. *The CIAO Multi-Dialect Compiler and System: An Experimentation Workbench for Future (C)LP Systems*. Parallelism and Implementation of Logic and Constraint Logic Programming, pages 65–85, Nova Science, April 1999.
10. M.V. Hermenegildo. *Fundamentos y Aplicación Automática del Paralelismo en Inteligencia Artificial*. Inteligencia Artificial: Fundamentos Teóricos y Aplicaciones, pages 127–153, Real Academia de Ciencias Exactas, Físicas y Naturales, March 1992.

Publications in Refereed Workshops:

1. M. Klemen, M.Á. Carreira-Perpiñán, P. Lopez-Garcia. *Solving Recurrence Relations using Machine Learning, with Application to Cost Analysis*. Technical Communications of the 39th International Conference on Logic Programming (ICLP 2023), Electronic Proceedings in Theoretical Computer Science (EPTCS), Vol. 385, pages 155–168, Open Publishing Association (OPA), July 2023.

2. D. Jurjo, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *Towards a rule-based approach for deriving abstract domains*. Technical Communications of the 39th International Conference on Logic Programming (ICLP 2023), Electronic Proceedings in Theoretical Computer Science (EPTCS), Vol. 385, pages 55–58, Open Publishing Association (OPA), July 2023. (Extended Abstract).
3. D. Ferreiro, J.F. Morales, S. Abreu, M.V. Hermenegildo. *Demonstrating (Hybrid) Active Logic Documents and the Ciao Prolog Playground, and an Application to Verification Tutorials*. Technical Communications of the 39th International Conference on Logic Programming (ICLP 2023), Electronic Proceedings in Theoretical Computer Science (EPTCS), Vol. 385, pages 324–330, Open Publishing Association (OPA), July 2023. See also associated poster at <https://cliplab.org/papers/hald-poster-iclp.pdf>.
4. Bishoksan Kafle, John P. Gallagher, Manuel V. Hermenegildo, Maximiliano Klemen, Pedro Lopez-Garcia, José F. Morales. *Regular Path Clauses and their Application in Solving Loops*. Proceedings of the Eighth International Workshop on Horn Clauses for Verification and Synthesis (HCVS 2021), Electronic Proceedings in Theoretical Computer Science (EPTCS), Vol. 344, pages 22–35, Open Publishing Association (OPA), August 2021. Co-located with ETAPS 2021.
5. M. A. Sanchez-Ordaz, I. Garcia-Contreras, V. Perez-Carrasco, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *VeriFly: On-the-fly Assertion Checking with CiaoPP*. 6th Workshop on Formal Integrated Development Environment (F-IDE 2021, part of NASA NFM’21), Electronic Proceedings in Theoretical Computer Science (EPTCS), pages 1–5, Open Publishing Association (OPA), May 2021. Co-located with ETAPS 2021.
6. I. Garcia-Contreras, J. F. Morales, M.V. Hermenegildo. *Incremental and Modular Context-sensitive Analysis*. Workshop on Horn Clauses for Verification and Synthesis (HCVS 2021), March 2021. (Talk).
7. I. Casso, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *Testing Your (Static Analysis) Truths*. Pre-proceedings of the 30th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR’20), September 2020.
8. I. Casso, J. F. Morales, P. Lopez-Garcia, R. Giacobazzi, M.V. Hermenegildo. *Computing Abstract Distances in Logic Programs*. Pre-proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR’19), November 2019.
9. I. Casso, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *An Integrated Approach to Assertion-Based Random Testing in Prolog*. Pre-proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR’19), November 2019.
10. M. Klemen, P. Lopez-Garcia, J. Gallagher, J.F. Morales, M.V. Hermenegildo. *A General Framework for Static Cost Analysis of Parallel Logic Programs*. Pre-proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR’19), November 2019.
11. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Experiments in Context-Sensitive Incremental and Modular Static Analysis in CiaoPP*. 10th Workshop on Tools for Automatic Program Analysis (TAPAS’19), October 2019. (Extended Abstract).
12. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Incremental Analysis of Logic Programs with Assertions and Open Predicates*. Pre-proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR’19), October 2019.

13. M. Klemen, P. Lopez-Garcia, J. Gallagher, J.F. Morales, M.V. Hermenegildo. *Towards a General Framework for Static Cost Analysis of Parallel Logic Programs*. Technical Communications of the 35th International Conference on Logic Programming (ICLP 2019), Electronic Proceedings in Theoretical Computer Science (EPTCS), pages 238–240, Open Publishing Association (OPA), September 2019. (Extended Abstract).
14. I. Casso, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *Towards Computing Abstract Distances in Logic Programs*. Technical Communications of the 35th International Conference on Logic Programming (ICLP 2019), Electronic Proceedings in Theoretical Computer Science (EPTCS), pages 65–66, Open Publishing Association (OPA), September 2019. (Extended Abstract).
15. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Multivariant Assertion-based Guidance in Abstract Interpretation*. Pre-proceedings of the 28th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'18), September 2018.
16. P. Lopez-Garcia, M. Klemen, U. Liqat, M.V. Hermenegildo. *A General Framework for Static Profiling of Parametric Resource Usage (extended abstract)*. 19th International Workshop on Logic and Computational Complexity (LCC 2018), 4 pages, July 2018. Associated to FLOC 2018.
17. I. Garcia-Contreras, J. F. Morales, M.V. Hermenegildo. *Towards Incremental and Modular Context-sensitive Analysis*. Technical Communications of the 34th International Conference on Logic Programming (ICLP 2018), OpenAccess Series in Informatics (OASICS), 2 pages, Dagstuhl Press, July 2018. (Extended Abstract).
18. M. Klemen, N. Stulova, P. Lopez-Garcia, J. F. Morales, M.V. Hermenegildo. *Towards Static Performance Guarantees for Programs with Run-time Checks*. Technical Communications of the 34th International Conference on Logic Programming (ICLP 2018), OpenAccess Series in Informatics (OASICS), 2 pages, July 2018. (Extended Abstract).
19. U. Liqat, Z. Banković, P. Lopez-Garcia, M.V. Hermenegildo. *Inferring Energy Bounds via Static Program Analysis and Evolutionary Modeling of Basic Blocks*. Pre-proceedings of the 27th International Symposium on Logic-Based Program Synthesis and Transformation (LOPSTR'17), October 2017. arXiv:1601.02800.
20. Nataliia Stulova. *On Improving Run-time Checking in Dynamic Languages*. Technical Communications of the 33rd International Conference on Logic Programming (ICLP 2017), OpenAccess Series in Informatics (OASICS), Vol. 58, pages 1501–1510, Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, 2017. CP/ICLP/SAT Doctoral Program 2017.
21. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Towards Run-time Checks Simplification via Term Hiding*. Technical Communications of the 33rd International Conference on Logic Programming (ICLP 2017), OpenAccess Series in Informatics (OASICS), Vol. 58, pages 91–93, Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, 2017. (Extended Abstract).
22. U. Liqat, Z. Banković, P. Lopez-Garcia, M.V. Hermenegildo. *Inferring Energy Bounds Statically by Evolutionary Analysis of Basic Blocks*. Workshop on High Performance Energy Efficient Embedded Systems (HIP3ES 2016), 2016. arXiv:1601.02800.
23. R. Haemmerle, M.V. Hermenegildo, M. Klemen, U. Liqat, P. Lopez-Garcia. *Energy Analysis and Verification by Translation to Horn Clauses and Abstract Interpretation*. Workshop on Horn Clauses for Verification and Synthesis (HCVS'2015), July 2015.
24. P. Lopez-Garcia, R. Haemmerlé, M. Klemen, U. Liqat, M.V. Hermenegildo. *Towards Energy Consumption Verification via Static Analysis*. Workshop on High Performance Energy Efficient Embedded Systems (HIP3ES), arXiv:1501.03064, 11 pages, 2015. arXiv:1512.09369.

25. U. Liqat, S. Kerrison, A. Serrano, K. Georgiou, P. Lopez-Garcia, N. Grech, M.V. Hermenegildo, K. Eder. *Energy Consumption Analysis of Programs based on XMOS ISA-Level Models*. Pre-proceedings of the 23rd International Symposium on Logic-Based Program Synthesis and Transformation (LOPSTR'13), September 2013.
26. A. Serrano, P. Lopez-Garcia, M.V. Hermenegildo. *Towards an Abstract Domain for Resource Analysis of Logic Programs Using Sized Types*. 23rd Workshop on Logic-based Methods in Programming Environments (WLPE 2013), 15 pages, August 2013. CoRR abs/1308.3940.
27. R. Haemmerlé. *Coinductive Proofs over Streams as CHR Confluence Proofs*. 9th Int'l. Workshop on Constraint Handling Rules (CHR 2012), September 2012.
28. D. Ivanovic, M. Carro, M.V. Hermenegildo. *Analyzing Service-Oriented Systems Using Their Data and Structure*. European Software Services and Systems Research – Results and Challenges (ICSE Workshop), July 2012.
29. D. Ivanović, M. Carro, M.V. Hermenegildo. *Exploring the Impact of Inaccuracy and Imprecision of QoS Assumptions on Proactive Constraint-Based QoS Prediction for Service Orchestrations*. Proceedings of the 4th International Workshop on Principles of Engineering Service-Oriented Systems, PESOS 2012, pages 931–937, IEEE Press, June 2012.
30. E. Albert, S. Genaim, G. Román-Díez. *Conditional Termination of Loops over Arrays*. ETAPS Workshop on Bytecode Semantics, Verification, Analysis and Transformation (BYTE-CODE'12), March 2012.
31. D. Ivanović, M. Carro, M.V. Hermenegildo. *Constraint-Based Runtime Prediction of SLA Violations in Service Orchestrations*. XII Jornadas sobre Programación y Lenguajes (PROLE), Universidad de Almería, 2012.
32. F. Bueno, M. García de la Banda, M.V. Hermenegildo, P. Lopez-Garcia, E. Mera, P. J. Stuckey. *Towards Resource Usage Analysis of MiniZinc Models*. MiniZinc Workshop (MZN'11), 15 pages, September 2011.
33. E. Albert, R. Bubel, S. Genaim, R. Hähnle, G. Román-Díez. *Verified Resource Guarantees for Heap Manipulating Programs*. 10th KeY Symposium, August 2011.
34. P. Lopez-Garcia, L. Darmawan, F. Bueno, M.V. Hermenegildo. *Interval-based Resource Usage Verification: Formalization and Prototype*. 2nd International Workshop on Foundational and Practical Aspects of Resource Analysis (FOPARA'2011), May 2011.
35. Diego Alonso, Puri Arenas, Samir Genaim. *Handling Non-linear Operations in the Value Analysis of COSTA*. Proceedings of the Bytecode 2011 workshop, the Sixth Workshop on Bytecode Semantics, Verification, Analysis and Transformation (Bytecode), Electronic Notes in Theoretical Computer Science, Vol. 279 Issue 1, pages 3–17, Elsevier, 2011.
36. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *The Ciao Approach to the Dynamic vs. Static Language Dilemma*. Proceedings for the International Workshop on Scripts to Programs (STOP'11), 4 pages, ACM, 2011.
37. D. Ivanović, M. Carro, M.V. Hermenegildo. *An Initial Proposal for Data-Aware Resource Analysis of Orchestrations with Applications to Predictive Monitoring*. International Workshops, ICSOC/ServiceWave 2009, Revised Selected Papers, LNCS, Num. 6275, Springer, September 2010.
38. E. Albert, M. Gómez-Zamalloa, J.M. Rojas, G. Puebla. *Towards Compositional CLP-based Test Data Generation for Imperative Languages*. 20th International Symposium on Logic-Based Program Synthesis and Transformation (LOPSTR'10), pages 47–57, July 2010. Extended Abstract.

39. D. Ivanović, M. Carro, M.V. Hermenegildo. *An Initial Proposal for Data-Aware Resource Analysis of Orchestrations with Applications to Proactive Monitoring*. Pre-proceedings of the 2nd Workshop on Monitoring, Adaptation and Beyond (MONA+), November 2009.
40. L. Scandolo, C. Kunz, G. Barthe, M.V. Hermenegildo. *Program Parallelization using Synchronized Pipelining*. Pre-proceedings of the 19th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'09), September 2009.
41. J. Navas, M. Méndez-Lojo, M.V. Hermenegildo. *User-Definable Resource Usage Bounds Analysis for Java Bytecode*. Vol. 253, Num. 5, pages 65–82, Elsevier - North Holland, March 2009.
42. G. Marpons, J. Mariño, M. Carro, A. Herranz, L.Á. Fredlund, J.J. Moreno-Navarro, A. Polo. *A Coding Rule Conformance Checker Integrated into GCC*. VIII Jornadas sobre Programación y Lenguajes, PROLE 2008, pages 245–249, October 2008.
43. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Ramírez, D. Zanardini. *Upper Bounds of Resource Usage for Java Bytecode using COSTA and its Web Interface*. Workshop on Resource Analysis, September 2008.
44. M. Méndez-Lojo, O. Lhoták, M.V. Hermenegildo. *Efficient Set Sharing using ZBDDs*. 21st Int'l. WS on Languages and Compilers for Parallel Computing (LCPC'08), LNCS, Vol. 5335, pages 94–108, Springer-Verlag, August 2008.
45. E. Albert, P. Arenas, S. Genaim, G. Puebla. *Dealing with Numeric Fields in Termination Analysis of Java-like Languages*. 10th Workshop on Formal Techniques for Java-like Programs, July 2008.
46. S. Genaim, F. Spoto. *Constancy Analysis*. 10th Workshop on Formal Techniques for Java-like Programs, July 2008.
47. E. Trias, J. Navas, E. S. Ackley, S. Forrest, M.V. Hermenegildo. *Two Efficient Representations for Set-Sharing Analysis in Logic Programs*. 17th International Workshop on Functional and (Constraint) Logic Programming, WFLP'08, 15 pages, July 2008.
48. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Ramírez, D. Zanardini. *The COSTA Cost and Termination Analyzer for Java Bytecode and its Web Interface (Tool Demo)*. 22nd European Conference on Object-Oriented Programming (ECOOP'08), July 2008.
49. R. Haemmerlé, H. Betz. *Verification of Constraint Handling Rules using Linear Logic Phase Semantics*. 5th Int'l. Workshop on Constraint Handling Rules (CHR 2011), Report Series 08-10, RICS-Linz, July 2008.
50. J. Navas, M. Méndez-Lojo, M.V. Hermenegildo. *Safe Upper-bounds Inference of Energy Consumption for Java Bytecode Applications*. The Sixth NASA Langley Formal Methods Workshop (LFM 08), pages 29–32, April 2008. Extended Abstract.
51. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Zanardini. *COSTA: A Cost and Termination Analyzer for Java Bytecode*. Proceedings of the Workshop on Bytecode Semantics, Verification, Analysis and Transformation (BYTECODE'08), Electronic Notes in Theoretical Computer Science, Elsevier, April 2008.
52. C. Ochoa, G. Puebla. *Oracle-Based Poly-Controlled Partial Evaluation*. ETAPS Workshop on Quantitative Aspects of Programming Languages (QAPL'08), Vol. 220, Num. 3, pages 145–161, Elsevier, March 2008.
53. M. Gómez-Zamalloa, E. Albert, G. Puebla. *On the Generation of Test Data for Prolog by Partial Evaluation*. Workshop on Logic-based methods in Programming Environments (WLPE'08), pages 26–43, 2008. Report number: WLPE/2008/06.

54. M. Gómez-Zamalloa, E. Albert, G. Puebla. *Towards Modular Interpretive Decompilation of Low-Level Code to Prolog*. 8th Spanish Conference on Programming and Computer Languages (PROLE'08), 2008.
55. G. Marpons-Ucero, J. Mariño, A. Herranz, L.Å. Fredlund, M. Carro, J.J. Moreno-Navarro. *Automatic Coding Rule Conformance Checking Using Logic Programs*. 17th Workshop on Logic-based methods in Programming Environments, WLPE 2007, September 2007.
56. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Zanardini. *A Generic Framework for the Cost Analysis of Java Bytecode*. Spanish Conference on Programming and Computer Languages (PROLE'07), September 2007.
57. E. Albert, J. Gallagher, M. Gómez-Zamalloa, G. Puebla. *Typed-based Homeomorphic Embedding for Online Termination*. 17th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'07), August 2007. Extended Abstract.
58. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Zanardini. *Applications of Static Slicing in Cost Analysis of Java Bytecode*. 3rd International Workshop on Programming Language Interference and Dependence (PLID'07), August 2007.
59. J. Navas, M. Méndez-Lojo, M.V. Hermenegildo. *An Efficient, Context and Path Sensitive Analysis Framework for Java Programs*. 9th Workshop on Formal Techniques for Java-like Programs FTfJP 2007, 12 pages, July 2007.
60. M. Gómez-Zamalloa, E. Albert, G. Puebla. *Improving the Decompilation of Java Bytecode to Prolog by Partial Evaluation*. ETAPS Workshop on Bytecode Semantics, Verification, Analysis and Transformation (BYTECODE'07), Electronic Notes in Theoretical Computer Science, Vol. 190, Issue 1, pages 85–101, Elsevier - North Holland, July 2007.
61. M.V. Hermenegildo, The Ciao Development Team. *An Overview of The Ciao Multiparadigm Language and Program Development Environment and its Design Philosophy*. ECOOP Workshop on Multiparadigm Programming with Object-Oriented Languages MPOOL 2007, July 2007.
62. E. Albert, P. Arenas, M. Codish, S. Genaim, G. Puebla, D. Zanardini. *Termination Analysis of Java Bytecode*. 9th International Workshop on Termination, WST'07, June 2007.
63. C. Ochoa, G. Puebla. *A Study on the Practicality of Poly-Controlled Partial Evaluation*. Proceedings of the 15th Workshop on Functional and (Constraint) Logic Programming (WFLP'06), Electronic Notes in Theoretical Computer Science, Vol. 177, pages 137–151, Elsevier, June 2007.
64. M. Méndez-Lojo, J. Navas, M.V. Hermenegildo. *An Efficient, Parametric Fixpoint Algorithm for Analysis of Java Bytecode*. ETAPS Workshop on Bytecode Semantics, Verification, Analysis and Transformation (BYTECODE 2007), Electronic Notes in Theoretical Computer Science, Elsevier - North Holland, March 2007.
65. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Zanardini. *Experiments in Cost Analysis of Java Bytecode*. ETAPS Workshop on Bytecode Semantics, Verification, Analysis and Transformation (BYTECODE'07), Electronic Notes in Theoretical Computer Science, Vol. 190, Issue 1, Elsevier, 2007.
66. E. Albert, P. Arenas, G. Puebla, M.V. Hermenegildo. *Generation of Reduced Certificates in Abstraction-Carrying Code*. VI Jornadas Programación y Lenguajes (PROLE'06), 10 pages, October 2006.

67. E. Mera, P. Lopez-Garcia, G. Puebla, M. Carro, M.V. Hermenegildo. *Towards Execution Time Estimation for Logic Programs via Static Analysis and Profiling*. 16th Workshop on Logic Programming Environments, pages 45–60, University of Namur, Institut d’Informatique, August 2006.
68. E. Albert, P. Arenas, G. Puebla. *Some Issues on Incremental Abstraction-Carrying Code*. 16th Workshop on Logic-Based Methods in Programming Environments (WLPE’06) , 15 pages, August 2006.
69. E. Albert, M. Gómez-Zamalloa, L. Hubert, G. Puebla. *Towards Verification of Java Bytecode using Tools for Logic Programming*. International Workshop on Software Verification and Validation (SVV 2006), 15 pages, August 2006.
70. E. Albert, P. Arenas, G. Puebla. *Incremental Certificates and Checkers for Abstraction-Carrying Code*. Sixth Workshop on Issues in the Theory of Security, 16 pages, March 2006.
71. J. Navas, F. Bueno, M.V. Hermenegildo. *A study of set-sharing analysis via cliques*. The 15th Workshop on Logic-Based Methods in Programming Environments, WLPE’05, 15 pages, October 2005.
72. G. Puebla, E. Albert, M.V. Hermenegildo. *A Generic Framework for the Analysis and Specialization of Logic Programs* . The 15th Workshop on Logic-Based Methods in Programming Environments, WLPE’05, 15 pages, October 2005.
73. E. Albert, G. Puebla, J. Gallagher. *A Partial Deducer Assisted by Predefined Assertions and a Backwards Analyzer*. 5th International Workshop on the Implementation of Logics (WIL’04), 9 pages, March 2005.
74. E. Albert, G. Puebla, M.V. Hermenegildo. *Abstract Interpretation-based Code Certification for Pervasive Systems: Preliminary Experiments*. Workshop on Software Analysis and Development for Pervasive Systems (SONDA’04), pages 1–6, August 2004.
75. E. Albert, G. Puebla, M.V. Hermenegildo. *An Abstract Interpretation-based Approach to Mobile Code Safety*. Proc. of Compiler Optimization meets Compiler Verification (COCV’04), Electronic Notes in Theoretical Computer Science 132(1), pages 113–129, Elsevier - North Holland, April 2004.
76. C. Vaucheret, F. Bueno. *More Precise Yet Efficient Type Inference for Logic Programs*. Workshop on Logic Programming Environments, July 2002.
77. S. Muñoz, J.J. Moreno-Navarro, M.V. Hermenegildo. *Efficient Implementation of General Negation Using Abstract Interpretation*. Proc. of the AGP’2000 Joint Conference on Declarative Programming, 15 pages, Italian Association for Logic Programming, December 2000.
78. F. Bueno, M. Garcia de la Banda, M.V. Hermenegildo, K. Marriott, G. Puebla, P. Stuckey. *A Model for Inter-module Analysis and Optimizing Compilation*. Tenth International Workshop on Logic-based Program Synthesis and Transformation, July 2000.
79. G. Puebla, M.V. Hermenegildo. *Some Issues in Analysis and Specialization of Modular Ciao-Prolog Programs*. Special Issue on Optimization and Implementation of Declarative Programming Languages, Electronic Notes in Theoretical Computer Science, Vol. 30, Num. 2, 25 pages, Elsevier - North Holland, March 2000.
80. D. Cabeza, M.V. Hermenegildo. *The Ciao Module System: A New Module System for Prolog*. Special Issue on Parallelism and Implementation of (C)LP Systems, Electronic Notes in Theoretical Computer Science, Vol. 30, Num. 3, Elsevier - North Holland, March 2000.

81. D. Cabeza, M.V. Hermenegildo. *The Ciao Modular, Standalone Compiler and Its Generic Program Processing Library*. Special Issue on Parallelism and Implementation of (C)LP Systems, Electronic Notes in Theoretical Computer Science, Vol. 30(3), Elsevier - North Holland, March 2000.
82. I. de Castro Dutra, V. Santos Costa, G. Gupta, E. Pontelli, M. Carro, P. Kacsuk (editors). *Parallelism and Implementation Technology for (Constraint) Logic Programming*. Electronic Notes in Theoretical Computer Science, Vol. 30, Num. 2, Elsevier - North Holland, March 2000.
83. D. Cabeza, M.V. Hermenegildo. *A New Module System for Prolog*. ICLP'99 WS on Parallelism and Implementation of (C)LP Systems, pages 110–128, N.M. State U., December 1999.
84. D. Cabeza, M.V. Hermenegildo. *The Ciao Modular Compiler and Its Generic Program Processing Library*. ICLP'99 WS on Parallelism and Implementation of (C)LP Systems, pages 147–164, N.M. State U., December 1999.
85. G. Puebla, M.V. Hermenegildo, J. Gallagher. *An Integration of Partial Evaluation in a Generic Abstract Interpretation Framework*. ACM SIGPLAN Workshop on Partial Evaluation and Semantics-Based Program Manipulation (PEPM'99), BRISC Series, Num. NS-99-1, pages 75–85, University of Aarhus, Denmark, January 1999.
86. G. Puebla, F. Bueno, M.V. Hermenegildo. *A Framework for Assertion-based Debugging in Constraint Logic Programming*. Proceedings of the JICSLP'98 Workshop on Types for CLP, pages 3–15, June 1998.
87. G. Puebla, F. Bueno, M.V. Hermenegildo. *An Assertion Language for Debugging of Constraint Logic Programs*. Proceedings of the ILPS'97 Workshop on Tools and Environments for (Constraint) Logic Programming, October 1997. Available from ftp://cliplab.org/pub/papers/assert_lang_tr_discipldeliv.ps.gz as technical report CLIP2/97.1.
88. G. Puebla, J. Gallagher, M.V. Hermenegildo. *Towards Integrating Partial Evaluation in a Specialization Framework based on Generic Abstract Interpretation*. Proceedings of the ILPS'97 Workshop on Specialization of Declarative Programs, October 1997. Post ILPS'97 Workshop.
89. G. Puebla, M. García de la Banda, M.V. Hermenegildo, K. Marriott, P. Stuckey. *Automatic Optimization of Logic Programs with Dynamic Scheduling*. Workshop on Abstract Interpretation of Logic Languages, The Hebrew University, December 1996.
90. M.V. Hermenegildo, F. Bueno, D. Cabeza, M. Carro, M. García de la Banda, P. Lopez-Garcia, G. Puebla. *The CIAO Multi-Dialect Compiler and System: A Demo and Status Report*. Proceedings of the JICSLP'96 Workshop on Parallelism and Implementation Technology, 12 pages, Computer Science Department, Technical University of Madrid, September 1996. Available from <https://www.cliplab.org/Projects/COMPULOG/meeting96/papers/PS/clip.ps.gz>.
91. G. Puebla, M.V. Hermenegildo. *Optimized Algorithms for the Incremental Analysis of Logic Programs*. II Workshop on Verification and Analysis of Logic Languages, September 1996.
92. M.V. Hermenegildo, F. Bueno, D. Cabeza, M. Carro, M. García de la Banda, P. Lopez-Garcia, G. Puebla. *The CIAO Multi-Dialect Compiler and System: An Experimentation Workbench for Future (C)LP Systems*. Proc. of the AGP'96 Joint Conference on Declarative Programming, pages 105–108, U. of the Basque Country, July 1996. Available from <ftp://www.cliplab.org/pub/papers>.

93. M. Codish, V. Lagoon, F. Bueno. *Sharing Analysis for Logic Programs using Set Logic Programs*. Proc. of the AGP'96 Joint Conference on Declarative Programming, pages 29–40, U. of the Basque Country, July 1996. Available from <https://www.cliplab.org/>.
94. G. Puebla, M.V. Hermenegildo. *Abstract Specialization and its Application to Program Parallelization*. V International Workshop on Metaprogramming and Metareasoning in Logic, 1996.
95. M.V. Hermenegildo, F. Bueno, M. García de la Banda, G. Puebla. *The CIAO Multi-Dialect Compiler and System: An Experimentation Workbench for Future (C)LP Systems*. Proceedings of the ILPS'95 Workshop on Visions for the Future of Logic Programming, December 1995. Available from <https://www.cliplab.org/>.
96. M. García de la Banda, F. Bueno, M.V. Hermenegildo. *Towards Automatic Compile-Time Parallelization of CLP Programs by Analysis and Transformation*. Proceedings of the ILPS'95 Workshop on Parallel Logic Programming Systems, U. of Oregon, December 1995.
97. M.V. Hermenegildo, The CLIP Group. *The CIAO Multiparadigm Compiler and System: A Progress Report*. Proc. of the Compulog Net Area Workshop on Parallelism and Implementation Technologies, Technical University of Madrid, September 1995.
98. F. Bueno, D. Cabeza, M.V. Hermenegildo, G. Puebla. *Data-flow Analysis of Standard Prolog Programs*. ICLP95 WS on Abstract Interpretation of Logic Languages, June 1995.
99. F. Bueno, M.V. Hermenegildo. *Analysis of Concurrent Constraint Logic Programs with a Fixed Scheduling Rule*. ICLP95 WS on Abstract Interpretation of Logic Languages, June 1995.
100. M. García de la Banda, K. Marriott, P. Stuckey. *Efficient Analysis of Constraint Logic Programs with Dynamic Scheduling*. ICLP95 WS on Abstract Interpretation of Logic Languages, June 1995.
101. M.V. Hermenegildo, The CLIP Group. *Some Methodological Issues in the Design of CIAO - A Generic, Parallel Concurrent Constraint System*. Proc. of the 1994 ICOT/NSF Workshop on Parallel and Concurrent Programming, U. of Oregon, March 1994.
102. M.V. Hermenegildo, The CLIP Group. *Towards CIAO-Prolog - A Parallel Concurrent Constraint System*. Proc. of the Compulog Net Area Workshop on Parallelism and Implementation Technologies, 10 pages, FIM/UPM, Madrid, Spain, June 1993.
103. V. Dumortier, G. Janssens, W. Simoens, M. García de la Banda. *Combining a Definiteness and a Freeness Abstraction for CLP Languages*. Workshop on Logic Program Synthesis and Transformation, 1993.
104. M. García de la Banda, M.V. Hermenegildo. *Some Considerations on the Compile-Time Analysis of Constraint Logic Programs*. Jornadas Nacionales de Programación Declarativa, pages 97–117, U. Malaga, October 1991.
105. M.V. Hermenegildo. *Compile-time Analysis Requirements for the Extended Andorra Model*. Parallel Logic Programming Workshop, SICS, June 1990.

Technical Reports and Manuals:

1. Daniela Ferreiro, Ignacio Casso, Pedro Lopez-Garcia, José F. Morales, Manuel V. Hermenegildo. *Checkification: A Practical Approach for Testing Static Analysis Truths*. Num. CLIP-1/2025.0, IMDEA Software Institute and Technical University of Madrid (UPM), January 2025. arXiv 2501.12093.

2. F. Ridoux. *Improvements to the Auxiliary Analyses for Cost Analysis*. CLIP Lab, IMDEA Software Institute, August 2024. Master internship report. Supervised by P. Lopez-Garcia, M.V. Hermenegildo, J. F. Morales and L. Rustenholz..
3. Daniel Jurjo, José F. Morales, Pedro Lopez-Garcia, Manuel V. Hermenegildo. *Abstract Environment Trimming*. Num. CLIP-2/2024.0, IMDEA Software Institute and Technical University of Madrid (UPM), May 2024.
4. Louis Rustenholz, Pedro Lopez-Garcia, José F. Morales, Manuel V. Hermenegildo. *An Order Theory Framework of Recurrence Equations for Static Cost Analysis - Dynamic Inference of Non-Linear Inequality Invariants*. Num. CLIP-1/2024.0, IMDEA Software Institute and Technical University of Madrid (UPM), May 2024.
5. Louis Rustenholz, Maximiliano Klemen, Miguel Ángel Carreira-Perpiñán, Pedro López-García. *A Machine Learning-based Approach for Solving Recurrence Relations and its use in Cost Analysis of Logic Programs*. 2024.
6. D. Jurjo, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *A Methodology for Designing and Composing Abstract Domains Using Rewriting Rules*. Num. CLIP-1/2023.0, CLIP Lab, UPM and IMDEA Software Institute, August 2023.
7. L. Rustenholz. *Automated Approximate Recurrence Solving applied to Static Analysis of Energy Consumption*. CLIP Lab, IMDEA Software Institute, August 2022. Master internship report. Supervised by M.V. Hermenegildo, P. Lopez-Garcia, and J. F. Morales.
8. M.A. Sanchez-Ordaz, I. Garcia-Contreras, V. Perez-Carrasco, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *VeriFly: On-the-fly Assertion Checking via Incrementality*. Num. CLIP-1/2021.0, 21 pages, The CLIP Lab, IMDEA Software Institute and T.U. Madrid, May 2021.
9. M. Klemen, P. Lopez-Garcia, J. Gallagher, J.F. Morales, M.V. Hermenegildo. *Towards a General Framework for Static Cost Analysis of Parallel Logic Programs*. Num. CLIP-1/2019.0, 19 pages, The CLIP Lab, IMDEA Software Institute and T.U. Madrid, July 2019.
10. I. Casso, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *Computing Abstract Distances in Logic Programs*. Num. CLIP-2/2019.0, 21 pages, The CLIP Lab, IMDEA Software Institute and T.U. Madrid, July 2019.
11. I. Garcia-Contreras, J. F. Morales, M.V. Hermenegildo. *An Approach to Incremental and Modular Context-sensitive Analysis of Logic Programs*. Num. CLIP-2/2018.0, 28 pages, The CLIP Lab, IMDEA Software Institute and T.U. Madrid, April 2018.
12. M. Klemen, N. Stulova, P. Lopez-Garcia, J. F. Morales, M.V. Hermenegildo. *An Approach to Static Performance Guarantees for Programs with Run-time Checks*. Num. CLIP-1/2018.0, 15 pages, The CLIP Lab, IMDEA Software Institute and T.U. Madrid, April 2018.
13. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Term Hiding and its Impact on Run-time Check Simplification*. Num. CLIP-1/2017.0, 27 pages, The CLIP Lab, May 2017. CoRR abs/1705.06662 (v2) [cs.PL].
14. P. Lopez-Garcia, R. Haemmerlé, U. Liqat, M. Klemen, M.V. Hermenegildo. *Parametric Static Profiling*. Num. CLIP-2/2015.0, The CLIP Lab, April 2015.
15. P. Lopez-Garcia, L. Darmawan, F. Bueno, M.V. Hermenegildo. *Towards Resource Usage Function Verification based on Input Data Size Intervals*. Num. CLIP4/2011.0, Technical University of Madrid (UPM), April 2011. Available at <https://cliplab.org/papers/resource-verif-11-tr.pdf>.

16. D. Ivanović, M. Carro, M.V. Hermenegildo. *Automated Attribute Inference in Complex Service Workflows Based on Sharing Analysis*. Num. CLIP5/2010.0, Technical University of Madrid (UPM), December 2010.
17. D. Ivanović, M. Carro, M.V. Hermenegildo. *Automatic Fragment Identification in Workflows Based on Sharing Analysis*. Num. CLIP4/2010.0, 15 pages, Technical University of Madrid (UPM), June 2010. Submitted.
18. E. Mera, T. Trigo, P. Lopez-Garcia, M.V. Hermenegildo. *An Approach to Profiling for Run-Time Checking of Computational Properties and Performance Debugging*. Num. CLIP3/2010.0, 29 pages, Technical University of Madrid (UPM), March 2010.
19. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *An Overview of Ciao and its Design Philosophy*. Num. CLIP2/2010.0, Technical University of Madrid (UPM), March 2010. Under consideration for publication in *Theory and Practice of Logic Programming (TPLP)*.
20. D. Ivanović, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, E. Mera. *Towards Data-Aware Cost-Driven Adaptation for Service Orchestrations*. Num. CLIP5/2009.1, Technical University of Madrid (UPM), March 2010.
21. P. Lopez-Garcia, L. Darmawan, F. Bueno, M.V. Hermenegildo. *Towards a Framework for Resource Usage Verification and Debugging in the CiaoPP System*. Num. CLIP1/2010.0, Technical University of Madrid (UPM), February 2010. Available at <https://cliplab.org/papers/resource-verif-10-tr.pdf>.
22. D. Ivanović, M. Carro, M.V. Hermenegildo. *Sharing-Based Independence-Driven Fragment Identification for Service Orchestrations*. Num. CLIP7/2009.0, Technical University of Madrid (UPM), December 2009.
23. D. Ivanović, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, E. Mera. *Towards Data-Aware Cost-Driven Adaptation for Service Orchestrations*. Num. CLIP5/2009.0, Technical University of Madrid (UPM), November 2009. Replaced by a later version.
24. D. Ivanović, M. Carro, M.V. Hermenegildo. *Towards Data-Aware Resource Analysis for Service Orchestrations*. Num. CLIP3/2009.0, Technical University of Madrid (UPM), June 2009.
25. E. Mera, P. Lopez-Garcia, M.V. Hermenegildo. *Towards Integrating Run-Time Checking and Software Testing in a Verification Framework*. Num. CLIP1/2009.0, 19 pages, Technical University of Madrid (UPM), March 2009.
26. P. Lopez-Garcia, F. Bueno, M.V. Hermenegildo. *Inferring Determinacy and Mutual Exclusion in Logic Programs Using Mode and Type Analysis*. Num. CLIP2/2009.0, Technical University of Madrid (UPM), February 2009.
27. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Zanardini. *Cost Analysis of Object-Oriented Bytecode Programs*. Num. CLIP7/2008.0, Technical University of Madrid (UPM), September 2008.
28. E. Trias, J. Navas, E. S. Ackley, S. Forrest, M.V. Hermenegildo. *Efficient Representations for Set-Sharing Analysis*. Num. CLIP9/2008.0, University of New Mexico and Technical University of Madrid, September 2008.
29. J. Navas, E. Mera, P. Lopez-Garcia, M.V. Hermenegildo. *Inference of User-Definable Resource Bounds Usage for Logic Programs and its Applications*. Num. CLIP5/2008.0, Technical University of Madrid (UPM), July 2008.

30. D. Zanardini. *The Semantics of Abstract Program Slicing*. Num. CLIP4/2008.0, Technical University of Madrid (UPM), June 2008.
31. M. Méndez-Lojo, O. Lhoták, M.V. Hermenegildo. *Fast Set Sharing using ZBDDs*. University of New Mexico, June 2008.
32. M. Gómez-Zamalloa, E. Albert, G. Puebla. *Modular Decompilation of Low-Level Code by Partial Evaluation*. Num. CLIP2/2008.0, Technical University of Madrid (UPM), April 2008. Available at <https://cliplab.org/papers/mod-decomp-tr.pdf>.
33. M.V. Hermenegildo, E. Albert, P. Arenas, F. Bueno, M. Carro, A. Casas, P. Chico de Guzmán, J. Correas, S. Genaim, J. Lipton, Pedro Lopez-Garcia, M. Méndez, E. Mera, J. Morales, J. Navas, R. Padilla, P. Pietrzak, G. Puebla, M. Zamalloa, D. Zanardini. *Rigorous Methods for Mobile and Heterogeneous Software Systems – Second Year Report*. Num. CLIP3/2008.0, Technical University of Madrid (UPM), April 2008.
34. J. Navas, M. Méndez-Lojo, M.V. Hermenegildo. *Customizable Resource Usage Analysis for Java Bytecode*. Num. UNM TR-CS-2008-02 - CLIP1/2008.0, University of New Mexico, January 2008.
35. G. Román-Díez, G. Puebla. *Java Bytecode Timing Cost Models*. Num. CLIP12/2007.0, Technical University of Madrid, December 2007.
36. A. Casas, M. Carro, M.V. Hermenegildo. *Automatic Unrestricted Independent And-Parallelism in Logic Programs*. Num. CLIP11/2007.0, Technical University of Madrid (UPM), December 2007. Under consideration for publication in *Theory and Practice of Logic Programming (TPLP)*.
37. M. Méndez-Lojo, M.V. Hermenegildo. *Precise Set Sharing for Java-style Programs (and proofs)*. Num. CLIP2/2007.1, Technical University of Madrid (UPM), November 2007.
38. A. Casas, M. Carro, M.V. Hermenegildo. *Towards a High-Level Implementation of Execution Primitives for Non-restricted, Independent And-parallelism*. Num. TR-CS-2007-16, University of New Mexico (UNM), October 2007.
39. A. Casas, M. Carro, M.V. Hermenegildo. *Annotation Algorithms for Unrestricted Independent And-Parallelism in Logic Programs*. Num. TR-CS-2007-14, University of New Mexico (UNM), September 2007.
40. E. Mera, P. Lopez-Garcia, M. Carro, M.V. Hermenegildo. *Towards Execution Time Estimation in Abstract Machine-Based (Logic) Languages*. Num. CLIP8/2007.0, Technical University of Madrid (UPM), August 2007.
41. G. Marpons, J. Mariño, M. Carro, A. Herranz, J.J. Moreno-Navarro, L.Á. Fredlund. *Automatic Coding Rule Conformance Checking Using Logic Programming*. Num. CLIP6/2007.0, Technical University of Madrid (UPM), August 2007.
42. E. Albert, P. Arenas, S. Genaim, G. Puebla. *Automatic Inference of Upper Bounds for Cost Equation Systems*. Num. CLIP10/2007.0, Technical University of Madrid, July 2007.
43. A. Casas, M. Carro, M.V. Hermenegildo. *Annotation Algorithms for Unrestricted Independent And-Parallelism in Logic Programs*. Num. CLIP5/2007.0, Technical University of Madrid (UPM), June 2007.
44. M.V. Hermenegildo, E. Albert, P. Arenas, A. Beascoa, F. Bueno, D. Cabeza, M. Carro, J. Correas, A. García Pañoso, J. Lipton, P. Lopez-Garcia, E. Mera, J. Morales, C. Ochoa, G. Puebla. *Rigorous Methods for Mobile and Heterogeneous Software Systems – First Year Report*. Num. CLIP4/2007.0, Technical University of Madrid (UPM), March 2007.

45. M. Méndez-Lojo, M.V. Hermenegildo. *Precise Set Sharing and Nullity Analysis for Java-style Programs*. Num. CLIP2/2007.0, Technical University of Madrid (UPM), February 2007.
46. M. Gómez-Zamalloa, E. Albert, G. Puebla. *Partial Evaluation Types for Improving the Decompilation of Java Bytecode to Prolog*. Num. CLIP1/2007.0, Technical University of Madrid (UPM), February 2007.
47. P. Lopez-Garcia, F. Bueno, M.V. Hermenegildo. *Inferring Determinacy in Logic Programs Using Mode and Type Information*. Num. CLIP3/2007.0, Technical University of Madrid (UPM), February 2007.
48. M. Méndez-Lojo, J. Navas, M.V. Hermenegildo. *Efficient, Parametric Analysis of Java Bytecode*. Num. CLIP9/2006.0, Technical University of Madrid (UPM), December 2006.
49. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Zanardini. *Automatic Cost Analysis of Java Bytecode*. Num. CLIP10/2006.0, Technical University of Madrid, December 2006.
50. M.V. Hermenegildo, The Ciao Development Team. *Why Ciao? –An Overview of the Ciao System’s Design Philosophy*. Num. CLIP7/2006.0, 6 pages, Technical University of Madrid (UPM), December 2006. Available from: <https://cliplab.org/papers/ciao-philosophy-note-tr.pdf>.
51. J. Navas, E. Mera, P. Lopez-Garcia, M.V. Hermenegildo. *Resource Bounds Analysis*. Num. CLIP6/2006.0, 19 pages, Technical University of Madrid (UPM), November 2006.
52. P. Pietrzak, M.V. Hermenegildo. *Improved Automatic Error Diagnosis Based on Abstract Interpretation*. Num. CLIP11/2006.0, Technical University of Madrid, September 2006.
53. E. Mera, P. Lopez-Garcia, G. Puebla, M. Carro, M.V. Hermenegildo. *Towards Combining Static Analysis and Profiling for Estimating Execution Times in Logic Programs*. Num. CLIP5/2006.0, 15 pages, Technical University of Madrid (UPM), April 2006.
54. E. Albert, P. Arenas, G. Puebla. *An Incremental Approach to Abstraction-Carrying Code*. Num. CLIP3/2006, 16 pages, Technical University of Madrid (UPM), March 2006.
55. F. Bueno, P. Lopez-Garcia, G. Puebla, M.V. Hermenegildo. *The Ciao Preprocessor*. Num. CLIP1/06, 99 pages, Technical University of Madrid (UPM), January 2006.
56. F. Bueno, P. Lopez-Garcia, G. Puebla, M.V. Hermenegildo. *A Tutorial on Program Development and Optimization using the Ciao Preprocessor*. Num. CLIP2/06, 55 pages, Technical University of Madrid (UPM), January 2006.
57. E. Albert, P. Arenas, G. Puebla, M.V. Hermenegildo. *Reduced Certificates for Abstraction-Carrying Code*. Num. CLIP8/2005.0, 19 pages, Technical University of Madrid (UPM), October 2005.
58. F. Bueno. *Solving set equations*. Num. CLIP9/2005.3(2008), Technical University of Madrid (UPM), September 2005.
59. E. Albert, G. Puebla, M.V. Hermenegildo. *Abstraction-Carrying Code: A Model for Mobile Code Safety*. Num. CLIP7/2005.0, 30 pages, Technical University of Madrid, July 2005.
60. G. Puebla, E. Albert, M.V. Hermenegildo. *Abstract Interpretation with Specialized Definitions*. Num. CLIP6/2005.0, Technical University of Madrid, July 2005.
61. F. Bueno, J. Navas, M.V. Hermenegildo. *Sharing, Freeness, Linearity, Redundancy, Widening, and Cliques*. Num. CLIP5/2005.0, 21 pages, Technical University of Madrid (UPM), April 2005.

62. E. Albert, G. Puebla, J. Gallagher. *A Partial Deducer Assisted by Predefined Assertions and a Backwards Analyzer*. Num. CLIP1/2005.0, 9 pages, Technical University of Madrid, February 2005.
63. F. Bueno. *Sharing Stars*. Num. CLIP17/2004.0, 44 pages, Technical University of Madrid, December 2004.
64. E. Mera. *Estimación de los coeficientes del análisis de complejidad mediante técnicas estadísticas*. Num. CLIP14/2004.0, Technical University of Madrid, September 2004.
65. F. Bueno, P. Lopez-Garcia, G. Puebla, M.V. Hermenegildo. *The Ciao Prolog Preprocessor*. Num. CLIP1/04, 72 pages, Technical University of Madrid (UPM), January 2004.
66. F. Bueno. *CiaoPP Internals*. Num. CLIP2/04, 66 pages, Technical University of Madrid (UPM), January 2004.
67. E. Albert, G. Puebla, M.V. Hermenegildo. *An Abstract Interpretation-based Approach to Mobile Code Safety*. Num. CLIP8/2003.0, 18 pages, Technical University of Madrid, November 2003.
68. G. Puebla, J. Correas, M.V. Hermenegildo. *The Design of a Generic Framework for Context-Sensitive Analysis of Modular Programs*. Num. CLIP7/2003.0, Technical University of Madrid, November 2003.
69. F. Bueno, D. Cámara, C. Vaucheret. *Analysis and specialization of programs with meta-calls*. Num. CLIP9/2003.0, Technical University of Madrid, June 2003.
70. C. Vaucheret, F. Bueno. *Structural Type Widening*. Num. CLIP2/2001.1, Facultad de Informática, UPM, Technical University of Madrid (UPM), January 2002.
71. F. Bueno, M.V. Hermenegildo, G. Puebla, P. J. Stuckey. *Safety for Logic Programs*. Num. CLIP1/2001.1, Facultad de Informática, UPM, Technical University of Madrid (UPM), 2001.
72. D. Cabeza, M.V. Hermenegildo. *Higher-order Logic Programming in Ciao*. Num. CLIP7/99.0, 15 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), September 1999.
73. D. Cabeza, M.V. Hermenegildo. *A New Module System for Prolog*. Num. CLIP8/99.0, 15 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), September 1999.
74. D. Cabeza, M.V. Hermenegildo. *The Ciao Modular Compiler and Its Generic Program Processing Library*. Num. CLIP9/99.0, 15 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), September 1999.
75. F. Bueno, P. Lopez-Garcia, G. Puebla, M.V. Hermenegildo, P. Pietrzak. *The CHIP Assertion Preprocessor*. Num. CLIP1/99.1, 50 pages, Technical University of Madrid (UPM), March 1999. Also as deliverable of the ESPRIT project DISCIPL.
76. M.V. Hermenegildo, G. Puebla, F. Bueno. *Using Global Analysis, Partial Specifications, and an Extensible Assertion Language for Program Validation and Debugging*. Num. CLIP8/98.0, Technical University of Madrid (UPM), October 1998.
77. F. Bueno. *Using Assertions for Static Debugging of CLP: A Manual*. Num. CLIP1/98.0, 15 pages, DISCIPL Project/CLIP Group, UPM, June 1998.
78. The CLIP Group. *Program Assertions*. Num. CLIP4/97.1, Facultad de Informática, UPM, August 1997.

79. S.K. Debray, P. Lopez-Garcia, M.V. Hermenegildo. *Towards Precise Non-Failure Analysis for Logic Programs*. Num. CLIP18/96.0, T.U. of Madrid (UPM), November 1996.
80. G. Puebla, M.V. Hermenegildo. *Optimized Algorithms for Incremental Analysis of Logic Programs*. Num. CLIP3/96.0, Facultad de Informática, UPM, February 1996.
81. G. Puebla, M.V. Hermenegildo. *Automatic Optimization of Dynamic Scheduling in Logic Programs*. Technical University of Madrid, January 1996.
82. S.K. Debray, P. Lopez-Garcia, M.V. Hermenegildo, N.-W. Lin. *Lower Bound Cost Estimation for Logic Programs*. Num. CLIP20/95.0, T.U. of Madrid (UPM), December 1995.
83. G. Puebla, M.V. Hermenegildo. *Specialization and Optimization of Constraint Programs with Dynamic Scheduling*. Num. CLIP12/95.0, Facultad de Informática, UPM, September 1995. Presented at the 1995 COMPULOG Meeting on Program Development.
84. F. Bueno. *The CIAO Multiparadigm Compiler: A User's Manual*. Num. CLIP8/95.0, Facultad de Informática, UPM, June 1995.
85. F. Bueno, D. Cabeza, M.V. Hermenegildo, G. Puebla. *Data-Flow Analysis of Prolog Programs with Extra-Logical Features*. Num. CLIP2/95.0, Computer Science Dept., Technical U. of Madrid (UPM), March 1995.
86. M. García de la Banda, K. Marriott, P. Stuckey. *Efficient Analysis of Constraint Logic Programs with Dynamic Scheduling*. Facultad de Informática, UPM, March 1995.
87. F. Bueno, D. Cabeza, M. García de la Banda, M.V. Hermenegildo, G. Puebla. *Abstract Functions for the Analysis of Builtins in the PLAI System*. Num. CLIP1/95.0, Computer Science Dept., Technical U. of Madrid (UPM), January 1995.
88. M.V. Hermenegildo, K. Marriott, G. Puebla, P. Stuckey. *Incremental Analysis of Logic Programs*. Num. CLIP 14/94.0, Computer Science Dept., Technical U. of Madrid (UPM), October 1994.
89. S.K. Debray, P. Lopez-Garcia, M.V. Hermenegildo. *Non-Failure Analysis for Logic Programs*. Num. CLIP14/94.0, T.U. of Madrid (UPM), October 1994.
90. F. Bueno, D. Cabeza, M.V. Hermenegildo, S. Prestwich, G. Puebla. *Some Improvements to an Abstract Syntax for Analysis and Optimization of Full (Parallel) Prolog*. Num. CLIP 8/94.0, Computer Science Dept., Technical U. of Madrid (UPM), September 1994.
91. G. Puebla, M.V. Hermenegildo. *An Implementation Technique for Multiple Program Specialization*. Num. CLIP7/94.0, Computer Science Dept., Technical U. of Madrid (UPM), August 1994.
92. S.K. Debray, P. Lopez-Garcia, M.V. Hermenegildo, N.-W. Lin. *Lower Bound Cost Estimation for Logic Programs*. Num. CLIP4/94.0, T.U. of Madrid (UPM), March 1994.
93. F. Bueno, M. García de la Banda, M.V. Hermenegildo. *The PLAI Abstract Interpretation System*. Num. CLIP2/94.0, Computer Science Dept., Technical U. of Madrid (UPM), February 1994.
94. M. García de la Banda, M.V. Hermenegildo, M. Bruynooghe, V. Dumortier, G. Janssens, W. Simoens. *Global Analysis of Constraint Logic Programs*. U. of Madrid (UPM), 1994.
95. F. Bueno, M. García de la Banda, M.V. Hermenegildo. *Effectiveness of Global Analysis in Strict Independence-Based Automatic Program Parallelization*. Num. CLIP7/93.0, T.U. of Madrid (UPM), October 1993.

96. D. Cabeza, M.V. Hermenegildo. *Towards Extracting Non-Strict Independent And-Parallelism Using Sharing and Freeness Information*. Num. CLIP5/92.1, U. of Madrid (UPM), August 1993.
97. F. Bueno, M. García de la Banda, D. Cabeza, M.V. Hermenegildo. *The \mathcal{E} -Prolog Compiler System — Automatic Parallelization Tools for LP*. Num. CLIP5/93.0, Computer Science Dept., Technical U. of Madrid (UPM), June 1993.
98. F. Bueno, M. Carro, D. Cabeza, F. Ballesteros, P. Lopez-Garcia, M. García de la Banda, M.V. Hermenegildo, L. Gómez, S. Prestwich, S.-W. Yan. *A Proposal for an Interchange Abstract Syntax for (Parallel) Prolog*. Num. CLIP3/93.0, 33 pages, Computer Science Dept., Technical U. of Madrid (UPM), June 1993.
99. K. Marriott, M. García de la Banda, M.V. Hermenegildo. *Analyzing Logic Programs with Dynamic Scheduling*. Num. CLIP6/93.1, T.U. of Madrid (UPM), October 1992.
100. D. Cabeza, M.V. Hermenegildo. *Extracting Non-Strict Independent And-Parallelism Using Sharing and Freeness Information*. Num. CLIP5/92.0, U. of Madrid (UPM), August 1992.
101. M. García de la Banda, M.V. Hermenegildo. *A Practical Approach to the Global Analysis of Constraint Logic Programs*. Num. without, U. of Madrid (UPM), April 1992. Presented at the 1992 FGCS Post-Conference Workshop on Constraint Logic Programming.
102. G. Janssens, M.V. Hermenegildo, F. Bueno, M. García de la Banda, A. Mulkers. *A Review of some Abstract Interpretation Systems*. Num. CW143, Department of Computer Science, Katholieke Universiteit Leuven, February 1992.
103. M. García de la Banda, M.V. Hermenegildo. *Effectiveness of Combined Sharing and Freeness Analysis using Abstract Interpretation*. Num. CLIP1/92.0, U. of Madrid (UPM), January 1992.
104. M. García de la Banda, M.V. Hermenegildo. *Analyzing Constraint Logic Programs*. Num. CLIP4/91.0, U. of Madrid (UPM), January 1991. Presented in ICLP-91 Workshop on Constraint Logic Programming, Paris.
105. K. Muthukumar, M.V. Hermenegildo. *Combined Determination of Sharing and Freeness of Program Variables Through Abstract Interpretation*. Num. STP-368-90, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, December 1990.
106. K. Muthukumar, M.V. Hermenegildo. *Deriving A Fixpoint Computation Algorithm for Top-down Abstract Interpretation of Logic Programs*. Num. ACT-DC-153-90, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, April 1990.
107. M.V. Hermenegildo, K. Muthukumar, K. Greene, F. Rossi, R. I. Nasr. *An Overview of the PAL Project*. Num. ACT-ST-234-89, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, September 1989.
108. K. Muthukumar, M.V. Hermenegildo. *Determination of Variable Dependence Information at Compile-Time Through Abstract Interpretation*. Num. ACA-ST-232-89, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, March 1989.
109. R. Warren, M.V. Hermenegildo, S.K. Debray. *MA3: A System for Automatic Generation of CGEs*. Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, February 1988.
110. R. Warren, M.V. Hermenegildo. *On the Practicality of Global Flow Analysis of Logic Programs*. Num. ACA-126-88, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, January 1988.

3 Publications in Program Specialization

Articles in Refereed Journals:

1. Emanuele De Angelis, Fabio Fioravanti, John P. Gallagher, Manuel V. Hermenegildo, Alberto Pettorossi, Maurizio Proietti. *Analysis and Transformation of Constrained Horn Clauses for Program Verification*. Theory and Practice of Logic Programming, Vol. 22, Num. 6, pages 1–69, Cambridge U. Press, November 2021.
2. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Some Trade-offs in Reducing the Overhead of Assertion Run-time Checks via Static Analysis*. Science of Computer Programming, Vol. 155, pages 3–26, Elsevier North-Holland, April 2018. Selected and Extended papers from the 2016 International Symposium on Principles and Practice of Declarative Programming.
3. J.F. Morales, M. Carro, M.V. Hermenegildo. *Description and Optimization of Abstract Machines in a Dialect of Prolog*. Theory and Practice of Logic Programming, Vol. 16, Num. 1, pages 1–58, Cambridge University Press, January 2016.
4. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *An Overview of Ciao and its Design Philosophy*. Theory and Practice of Logic Programming, Vol. 12, Num. 1–2, pages 219–252, Cambridge University Press, January 2012.
5. G. Puebla, E. Albert, M.V. Hermenegildo. *Efficient Local Unfolding with Ancestor Stacks*. Theory and Practice of Logic Programming, Vol. 11, Num. 1, pages 1–32, Cambridge U. Press, January 2011.
6. M. Gómez-Zamalloa, E. Albert, G. Puebla. *Test Case Generation for Object-Oriented Imperative Languages in CLP*. Theory and Practice of Logic Programming, 26th Int'l. Conference on Logic Programming (ICLP'10) Special Issue, Vol. 10 (4–6), pages 659–674, Cambridge U. Press, July 2010.
7. M. Gómez-Zamalloa, E. Albert, G. Puebla. *Decompilation of Java Bytecode to Prolog by Partial Evaluation*. Information and Software Technology, Vol. 51, Num. 10, pages 1409–1427, Elsevier, October 2009.
8. E. Albert, J. Gallagher, M. Gómez-Zamalloa, G. Puebla. *Type-based Homeomorphic Embedding for Online Termination*. Information Processing Letters, Vol. 109, Num. 15, pages 879–886, Elsevier, July 2009.
9. M.V. Hermenegildo, G. Puebla, F. Bueno, P. Lopez-Garcia. *Integrated Program Debugging, Verification, and Optimization Using Abstract Interpretation (and The Ciao System Preprocessor)*. Science of Computer Programming, Vol. 58, Num. 1–2, pages 115–140, Elsevier North-Holland, October 2005.
10. G. Puebla, M.V. Hermenegildo. *Abstract Multiple Specialization and its Application to Program Parallelization*. J. of Logic Programming. Special Issue on Synthesis, Transformation and Analysis of Logic Programs, Vol. 41, Num. 2&3, pages 279–316, Elsevier - North Holland, November 1999.

Articles in Refereed Conferences:

1. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Incremental Analysis of Logic Programs with Assertions and Open Predicates*. Proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), LNCS, Vol. 12042, pages 36–56, Springer, 2020.

2. E. Albert, M. Gómez-Zamalloa, J.M. Rojas. *Resource-driven CLP-based Test Case Generation*. Proc. of LOPSTR'11, LNCS, Vol. 7225, pages 25–41, Springer-Verlag, 2012.
3. Elvira Albert, Israel Cabañas, Antonio Flores-Montoya, Miguel Gómez-Zamalloa, Sergio Gutiérrez. *jPET: an Automatic Test-Case Generator for Java*. 18th Working Conference on Reverse Engineering (WCRE 2011), 2 pages, IEEE Computer Society, October 2011.
4. J. F. Morales, M.V. Hermenegildo, R. Haemmerlé. *Modular Extensions for Modular (Logic) Languages*. Proceedings of the 21th International Symposium on Logic-Based Program Synthesis and Transformation (LOPSTR'11), LNCS, Vol. 7225, pages 139–154, Springer, July 2011.
5. E. Albert, P. Arenas, S. Genaim, M. Gómez-Zamalloa, G. Puebla. *Cost Analysis of Concurrent OO Programs*. The 9th Asian Symposium on Programming Languages and Systems (APLAS'11), Vol. 7078, pages 238–254, Springer, 2011.
6. E. Albert, M. Gómez-Zamalloa, J.M. Rojas, G. Puebla. *Compositional CLP-based Test Data Generation for Imperative Languages*. LOPSTR 2010 Revised Selected Papers, LNCS, Vol. 6564, pages 99–116, Springer-Verlag, 2011.
7. E. Albert, M. Gómez-Zamalloa, G. Puebla. *PET: A Partial Evaluation-based Test Case Generation Tool for Java Bytecode*. ACM SIGPLAN Workshop on Partial Evaluation and Semantics-based Program Manipulation (PEPM'10), pages 25–28, ACM Press, 2010.
8. E. Albert, M. Gómez-Zamalloa, G. Puebla. *Test Data Generation of Bytecode by CLP Partial Evaluation*. 18th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'08), LNCS, Vol. 5438, pages 4–23, Springer-Verlag, March 2009.
9. M. Gómez-Zamalloa, E. Albert, G. Puebla. *Modular Decompilation of Low-Level Code by Partial Evaluation*. 8th IEEE International Working Conference on Source Code Analysis and Manipulation (SCAM'08), pages 239–248, IEEE Computer Society, September 2008.
10. D. Zanardini. *The Semantics of Abstract Program Slicing*. 8th International Working Conference on Source Code Analysis and Manipulation (SCAM'08), IEEE Computer Society, September 2008.
11. Elvira Albert, Puri Arenas, Samir Genaim, German Puebla. *Automatic Inference of Upper Bounds for Recurrence Relations in Cost Analysis*. Static Analysis, 15th International Symposium, SAS 2008, Valencia, Spain, July 15-17, 2008, Proceedings, Lecture Notes in Computer Science, Vol. 5079, pages 221–237, Springer-Verlag, July 2008.
12. E. Albert, J. Gallagher, M. Gómez-Zamalloa, G. Puebla. *Type-based Homeomorphic Embedding and its Applications to Online Partial Evaluation*. 17th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'07), LNCS, Vol. 4915, pages 23–42, Springer-Verlag, February 2008.
13. J.F. Morales, M. Carro, M.V. Hermenegildo. *Towards Description and Optimization of Abstract Machines in an Extension of Prolog*. Logic-Based Program Synthesis and Transformation (LOPSTR'06), LNCS, Num. 4407, pages 77–93, July 2007.
14. C. Ochoa, G. Puebla. *Poly-Controlled Partial Evaluation in Practice*. ACM Partial Evaluation and Program Manipulation (PEPM'07), pages 164–173, ACM Press, January 2007.
15. M. Carro, J. Morales, H.L. Muller, G. Puebla, M.V. Hermenegildo. *High-Level Languages for Small Devices: A Case Study*. Compilers, Architecture, and Synthesis for Embedded Systems, pages 271–281, ACM Press / Sheridan, October 2006.

16. C. Ochoa, J. Silva, G. Vidal. *A Slicing Tool for Lazy Functional Logic Programs*. Proceedings of the 10th European Conference on Logics in Artificial Intelligence (JELIA'06), LNCS, Num. 4160, pages 498–501, Springer, September 2006.
17. G. Puebla, E. Albert, M.V. Hermenegildo. *Abstract Interpretation with Specialized Definitions*. The 13th International Static Analysis Symposium (SAS'06), LNCS, Num. 4134, pages 107–126, Springer, August 2006.
18. C. Ochoa, G. Puebla, M.V. Hermenegildo. *Removing Superfluous Versions in Polyvariant Specialization of Prolog Programs*. 15th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'05), LNCS, Num. 3901, pages 80–97, Springer-Verlag, April 2006.
19. E. Albert, G. Puebla, J. Gallagher. *Non-Leftmost Unfolding in Partial Evaluation of Logic Programs with Impure Predicates*. 15th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'05), LNCS, Num. 3901, pages 115–132, Springer-Verlag, April 2006.
20. G. Puebla, C. Ochoa. *Poly-Controlled Partial Evaluation*. 8th ACM-SIGPLAN International Symposium on Principles and Practice of Declarative Programming (PPDP'06), ACM Press, 2006.
21. G. Puebla, E. Albert, M.V. Hermenegildo. *A Generic Framework for the Analysis and Specialization of Logic Programs*. International Conference on Logic Programming (ICLP 2005), LNCS, Num. 3668, pages 407–409, Springer, October 2005. Extended Abstract.
22. G. Puebla, E. Albert, M.V. Hermenegildo. *Efficient Local Unfolding with Ancestor Stacks for Full Prolog*. 14th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'04), LNCS, Num. 3573, pages 149–165, Springer-Verlag, August 2005.
23. F. Bueno, M. García de la Banda, M.V. Hermenegildo, K. Marriott, G. Puebla, P. Stuckey. *A Model for Inter-module Analysis and Optimizing Compilation*. Logic-based Program Synthesis and Transformation, LNCS, Num. 2042, pages 86–102, Springer-Verlag, March 2001.
24. D. Cabeza, M.V. Hermenegildo. *A New Module System for Prolog*. International Conference on Computational Logic, CL2000, LNAI, Num. 1861, pages 131–148, Springer-Verlag, July 2000.
25. G. Puebla, M. García de la Banda, K. Marriott, P. Stuckey. *Optimization of Logic Programs with Dynamic Scheduling*. 1997 International Conference on Logic Programming, pages 93–107, MIT Press, June 1997.
26. G. Puebla, M.V. Hermenegildo. *Abstract Specialization and its Application to Program Parallelization*. Logic Program Synthesis and Transformation, LNCS, Num. 1207, pages 169–186, Springer-Verlag, 1997.
27. G. Puebla, M.V. Hermenegildo. *Automatic Optimization of Dynamic Scheduling in Logic Programs*. Programming Languages: Implementation, Logics, and Programs, LNCS, Num. 1140, pages 475–476, Springer-Verlag, September 1996. Poster abstract.
28. G. Puebla, M.V. Hermenegildo. *Implementation of Multiple Specialization in Logic Programs*. Proc. ACM SIGPLAN Symposium on Partial Evaluation and Semantics Based Program Manipulation, pages 77–87, ACM Press, June 1995.
29. F. Giannotti, M.V. Hermenegildo. *A Technique for Recursive Invariance Detection and Selective Program Specialization*. Proc. 3rd Int'l. Symposium on Programming Language Implementation and Logic Programming, LNCS, Num. 528, pages 323–335, Springer-Verlag, August 1991.

Books and Monographs:

1. J.F. Morales. *Advanced Compilation Techniques for Logic Programming*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informática UPM, 28660-Boadilla del Monte, Madrid-Spain, July 2010.
2. M. Gómez-Zamalloa. *Transformation and Analysis of Object-Oriented Bytecode*. Ph.D. Thesis, Complutense University of Madrid, October 2009.
3. G. Puebla. *Advanced Compilation Techniques based on Abstract Interpretation and Program Transformation*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informática UPM, 28660-Boadilla del Monte, Madrid-Spain, November 1997.
4. G. Puebla. *Simplification and Specialization of Logic Programs based on Abstract Interpretation*. Ms. Thesis, School of Computer Science. Technical University of Madrid, January 1994. (in Spanish).

Invited Papers and Tutorials:

1. M.V. Hermenegildo. *50-Years of Prolog and Beyond (invited talk)*. November 2022. Keynote given at the Prolog 50th Anniversary ‘Prolog Day Symposium’.
2. M.V. Hermenegildo. *Some reflections on Prolog’s evolution, status, and future on the 50th anniversary of the birth of Prolog (abstract of invited talk)*. 38th International Conference on Logic Programming (ICLP’22 at FLoC’22), August 2022.
3. J. Gallagher, M.V. Hermenegildo, B. Kafle, M. Klemen, P. Lopez-Garcia, J.F. Morales. *From big-step to small-step semantics and back with interpreter specialization (invited paper)*. Proceedings of the Eighth International Workshop on Verification and Program Transformation (VPT 2020), Electronic Proceedings in Theoretical Computer Science (EPTCS), pages 50–65, Open Publishing Association (OPA), September 2020. Co-located with ETAPS 2020.
4. M.V. Hermenegildo, M. Carro, P. Lopez-Garcia, J.F. Morales, J. Arias, I. Garcia-Contreras, M. Klemen, N. Stulova. *25 Years of Ciao (abstract of invited tutorial)*. Pre-proceedings of the 28th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR’18), September 2018. Talk slides at https://cliplab.org/papers/ciao_tut_lopstr18.pdf.
5. G. Puebla, M.V. Hermenegildo. *Abstract Specialization and its Applications*. ACM Partial Evaluation and Semantics based Program Manipulation (PEPM’03), pages 29–43, ACM Press, June 2003. Invited talk.
6. M.V. Hermenegildo, G. Puebla, F. Bueno, P. Lopez-Garcia. *Program Development Using Abstract Interpretation (and The Ciao System Preprocessor)*. 10th International Static Analysis Symposium (SAS’03), LNCS, Num. 2694, pages 127–152, Springer-Verlag, June 2003.
7. M.V. Hermenegildo, G. Puebla. *Applying Multiple Abstract Specialization to Program Parallelization (abstract)*. Partial Evaluation– Dagstuhl Seminar Report, Num. 134, 1 pages, IBFI – Dagstuhl, February 1996.

Articles in Books and Other Collections:

1. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, J.F. Morales, G. Puebla. *An Overview of The Ciao Multiparadigm Language and Program Development Environment and its Design Philosophy*. Festschrift for Ugo Montanari, LNCS, Vol. 5065, pages 209–237, Springer-Verlag, June 2008.

2. M.V. Hermenegildo, G. Puebla, F. Bueno. *Using Global Analysis, Partial Specifications, and an Extensible Assertion Language for Program Validation and Debugging*. The Logic Programming Paradigm: a 25-Year Perspective, pages 161–192, Springer-Verlag, July 1999.

Publications in Refereed Workshops:

1. Bishoksan Kafle, John P. Gallagher, Manuel V. Hermenegildo, Maximiliano Klemen, Pedro Lopez-Garcia, José F. Morales. *Regular Path Clauses and their Application in Solving Loops*. Proceedings of the Eighth International Workshop on Horn Clauses for Verification and Synthesis (HCVS 2021), Electronic Proceedings in Theoretical Computer Science (EPTCS), Vol. 344, pages 22–35, Open Publishing Association (OPA), August 2021. Co-located with ETAPS 2021.
2. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Incremental Analysis of Logic Programs with Assertions and Open Predicates*. Pre-proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), October 2019.
3. F. Bueno, M. García de la Banda, M.V. Hermenegildo, P. Lopez-Garcia, E. Mera, P. J. Stuckey. *Towards Resource Usage Analysis of MiniZinc Models*. MiniZinc Workshop (MZN'11), 15 pages, September 2011.
4. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *The Ciao Approach to the Dynamic vs. Static Language Dilemma*. Proceedings for the International Workshop on Scripts to Programs (STOP'11), 4 pages, ACM, 2011.
5. E. Albert, M. Gómez-Zamalloa, J.M. Rojas, G. Puebla. *Towards Compositional CLP-based Test Data Generation for Imperative Languages*. 20th International Symposium on Logic-Based Program Synthesis and Transformation (LOPSTR'10), pages 47–57, July 2010. Extended Abstract.
6. C. Ochoa, G. Puebla. *Oracle-Based Poly-Controlled Partial Evaluation*. ETAPS Workshop on Quantitative Aspects of Programming Languages (QAPL'08), Vol. 220, Num. 3, pages 145–161, Elsevier, March 2008.
7. M. Gómez-Zamalloa, E. Albert, G. Puebla. *On the Generation of Test Data for Prolog by Partial Evaluation*. Workshop on Logic-based methods in Programming Environments (WLPE'08), pages 26–43, 2008. Report number: WLPE/2008/06.
8. M. Gómez-Zamalloa, E. Albert, G. Puebla. *Towards Modular Interpretive Decompilation of Low-Level Code to Prolog*. 8th Spanish Conference on Programming and Computer Languages (PROLE'08), 2008.
9. E. Albert, J. Gallagher, M. Gómez-Zamalloa, G. Puebla. *Typed-based Homeomorphic Embedding for Online Termination*. 17th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'07), August 2007. Extended Abstract.
10. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Zanardini. *Applications of Static Slicing in Cost Analysis of Java Bytecode*. 3rd International Workshop on Programming Language Interference and Dependence (PLID'07), August 2007.
11. M. Gómez-Zamalloa, E. Albert, G. Puebla. *Improving the Decompilation of Java Bytecode to Prolog by Partial Evaluation*. ETAPS Workshop on Bytecode Semantics, Verification, Analysis and Transformation (BYTECODE'07), Electronic Notes in Theoretical Computer Science, Vol. 190, Issue 1, pages 85–101, Elsevier - North Holland, July 2007.
12. C. Ochoa, G. Puebla. *A Study on the Practicality of Poly-Controlled Partial Evaluation*. Proceedings of the 15th Workshop on Functional and (Constraint) Logic Programming (WFLP'06), Electronic Notes in Theoretical Computer Science, Vol. 177, pages 137–151, Elsevier, June 2007.

13. G. Puebla, E. Albert, M.V. Hermenegildo. *A Generic Framework for the Analysis and Specialization of Logic Programs*. The 15th Workshop on Logic-Based Methods in Programming Environments, WLPE'05, 15 pages, October 2005.
14. E. Albert, G. Puebla, J. Gallagher. *A Partial Deducer Assisted by Predefined Assertions and a Backwards Analyzer*. 5th International Workshop on the Implementation of Logics (WIL'04), 9 pages, March 2005.
15. G. Puebla, E. Albert. *Efficient Leftmost Unfolding with Ancestor Stacks*. Pre-proceedings of the 14th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'04), August 2004.
16. F. Bueno, M. Garcia de la Banda, M.V. Hermenegildo, K. Marriott, G. Puebla, P. Stuckey. *A Model for Inter-module Analysis and Optimizing Compilation*. Tenth International Workshop on Logic-based Program Synthesis and Transformation, July 2000.
17. G. Puebla, M.V. Hermenegildo. *Some Issues in Analysis and Specialization of Modular Ciao-Prolog Programs*. Special Issue on Optimization and Implementation of Declarative Programming Languages, Electronic Notes in Theoretical Computer Science, Vol. 30, Num. 2, 25 pages, Elsevier - North Holland, March 2000.
18. D. Cabeza, M.V. Hermenegildo. *The Ciao Module System: A New Module System for Prolog*. Special Issue on Parallelism and Implementation of (C)LP Systems, Electronic Notes in Theoretical Computer Science, Vol. 30, Num. 3, Elsevier - North Holland, March 2000.
19. I. de Castro Dutra, V. Santos Costa, G. Gupta, E. Pontelli, M. Carro, P. Kacsuk (editors). *Parallelism and Implementation Technology for (Constraint) Logic Programming*. Electronic Notes in Theoretical Computer Science, Vol. 30, Num. 2, Elsevier - North Holland, March 2000.
20. D. Cabeza, M.V. Hermenegildo. *A New Module System for Prolog*. ICLP'99 WS on Parallelism and Implementation of (C)LP Systems, pages 110–128, N.M. State U., December 1999.
21. G. Puebla, M.V. Hermenegildo, J. Gallagher. *An Integration of Partial Evaluation in a Generic Abstract Interpretation Framework*. ACM SIGPLAN Workshop on Partial Evaluation and Semantics-Based Program Manipulation (PEPM'99), BRISC Series, Num. NS-99-1, pages 75–85, University of Aarhus, Denmark, January 1999.
22. G. Puebla, J. Gallagher, M.V. Hermenegildo. *Towards Integrating Partial Evaluation in a Specialization Framework based on Generic Abstract Interpretation*. Proceedings of the ILPS'97 Workshop on Specialization of Declarative Programs, October 1997. Post ILPS'97 Workshop.
23. G. Puebla, M. García de la Banda, M.V. Hermenegildo, K. Marriott, P. Stuckey. *Automatic Optimization of Logic Programs with Dynamic Scheduling*. Workshop on Abstract Interpretation of Logic Languages, The Hebrew University, December 1996.
24. G. Puebla, M.V. Hermenegildo. *Abstract Specialization and its Application to Program Parallelization*. V International Workshop on Metaprogramming and Metareasoning in Logic, 1996.

Technical Reports and Manuals:

1. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *An Overview of Ciao and its Design Philosophy*. Num. CLIP2/2010.0, Technical University of Madrid (UPM), March 2010. Under consideration for publication in *Theory and Practice of Logic Programming (TPLP)*.

2. J.F. Morales, M. Carro, M.V. Hermenegildo. *Description and Optimization of Abstract Machines in a Dialect of Prolog*. Num. CLIP4/2009.0, Technical University of Madrid (UPM), October 2009.
3. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Zanardini. *Cost Analysis of Object-Oriented Bytecode Programs*. Num. CLIP7/2008.0, Technical University of Madrid (UPM), September 2008.
4. D. Zanardini. *The Semantics of Abstract Program Slicing*. Num. CLIP4/2008.0, Technical University of Madrid (UPM), June 2008.
5. M. Gómez-Zamalloa, E. Albert, G. Puebla. *Modular Decompilation of Low-Level Code by Partial Evaluation*. Num. CLIP2/2008.0, Technical University of Madrid (UPM), April 2008. Available at <https://cliplab.org/papers/mod-decomp-tr.pdf>.
6. M.V. Hermenegildo, E. Albert, P. Arenas, F. Bueno, M. Carro, A. Casas, P. Chico de Guzmán, J. Correas, S. Genaim, J. Lipton, Pedro Lopez-Garcia, M. Méndez, E. Mera, J. Morales, J. Navas, R. Padilla, P. Pietrzak, G. Puebla, M. Zamalloa, D. Zanardini. *Rigorous Methods for Mobile and Heterogeneous Software Systems – Second Year Report*. Num. CLIP3/2008.0, Technical University of Madrid (UPM), April 2008.
7. M.V. Hermenegildo, E. Albert, P. Arenas, A. Beascoa, F. Bueno, D. Cabeza, M. Carro, J. Correas, A. García Pañoso, J. Lipton, P. Lopez-Garcia, E. Mera, J. Morales, C. Ochoa, G. Puebla. *Rigorous Methods for Mobile and Heterogeneous Software Systems – First Year Report*. Num. CLIP4/2007.0, Technical University of Madrid (UPM), March 2007.
8. M. Gómez-Zamalloa, E. Albert, G. Puebla. *Partial Evaluation Types for Improving the Decompilation of Java Bytecode to Prolog*. Num. CLIP1/2007.0, Technical University of Madrid (UPM), February 2007.
9. J. Morales, M. Carro, M.V. Hermenegildo. *Description and Optimization of Abstract Machines in an Extension of Prolog*. Num. CLIP8/2006.0, 43 pages, Technical University of Madrid (UPM), December 2006.
10. M. Carro, J. Morales, H.L. Muller, G. Puebla, M.V. Hermenegildo. *Optimizing Prolog for Small Devices: A Case Study*. Num. CLIP4/2006.0, 16 pages, Technical University of Madrid, April 2006. Under consideration for publication.
11. G. Puebla, E. Albert, M.V. Hermenegildo. *Abstract Interpretation with Specialized Definitions*. Num. CLIP6/2005.0, Technical University of Madrid, July 2005.
12. E. Albert, G. Puebla, J. Gallagher. *A Partial Deducer Assisted by Predefined Assertions and a Backwards Analyzer*. Num. CLIP1/2005.0, 9 pages, Technical University of Madrid, February 2005.
13. G. Puebla, E. Albert, M.V. Hermenegildo. *Efficient Local Unfolding with Ancestor Stacks for Full Prolog*. Num. CLIP2/2005.0, Technical University of Madrid, February 2005.
14. F. Bueno, D. Cámara, C. Vaucheret. *Analysis and specialization of programs with meta-calls*. Num. CLIP9/2003.0, Technical University of Madrid, June 2003.
15. D. Cabeza, M.V. Hermenegildo. *A New Module System for Prolog*. Num. CLIP8/99.0, 15 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), September 1999.
16. G. Puebla, M.V. Hermenegildo. *Automatic Optimization of Dynamic Scheduling in Logic Programs*. Technical University of Madrid, January 1996.

17. G. Puebla, M.V. Hermenegildo. *Specialization and Optimization of Constraint Programs with Dynamic Scheduling*. Num. CLIP12/95.0, Facultad de Informática, UPM, September 1995. Presented at the 1995 COMPULOG Meeting on Program Development.
18. G. Puebla, M.V. Hermenegildo. *An Implementation Technique for Multiple Program Specialization*. Num. CLIP7/94.0, Computer Science Dept., Technical U. of Madrid (UPM), August 1994.
19. F. Giannotti, M.V. Hermenegildo. *A Technique for Recursive Invariance Detection and Selective Program Specialization*. Num. CLIP7/91.0, U. of Madrid (UPM), February 1991.

4 Publications in Resource Consumption Analysis and Optimization

Articles in Refereed Journals:

1. Louis Rustenholz, Maximiliano Klemen, Miguel Ángel Carreira-Perpiñán, Pedro López-García. *A Machine Learning-based Approach for Solving Recurrence Relations and its use in Cost Analysis of Logic Programs*. TPLP, Vol. 24, Num. 6, pages 1163–1207, November 2024.
2. M.A. Sanchez-Ordaz, I. Garcia-Contreras, V. Perez-Carrasco, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *VeriFly: On-the-fly Assertion Checking via Incrementality*. Theory and Practice of Logic Programming, Vol. 21, Num. 6, pages 768–784, Cambridge U. Press, September 2021.
3. Zorana Banković, Umer Liqat, Pedro Lopez-Garcia. *A General Methodology for Energy-efficient Scheduling in Multicore Environments based on Evolutionary Algorithms*. Journal of Multiple-Valued Logic and Soft Computing (JMVLS), SOCO'15 Special Issue, Vol. 32, Num. 3-4, pages 313–341, Old City Publishing, 2019.
4. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Some Trade-offs in Reducing the Overhead of Assertion Run-time Checks via Static Analysis*. Science of Computer Programming, Vol. 155, pages 3–26, Elsevier North-Holland, April 2018. Selected and Extended papers from the 2016 International Symposium on Principles and Practice of Declarative Programming.
5. P. Lopez-Garcia, L. Darmawan, M. Klemen, U. Liqat, F. Bueno, M.V. Hermenegildo. *Interval-based Resource Usage Verification by Translation into Horn Clauses and an Application to Energy Consumption*. Theory and Practice of Logic Programming, Special Issue on Computational Logic for Verification, Vol. 18, Num. 2, pages 167–223, Cambridge U. Press, March 2018. arXiv:1803.04451.
6. U. Liqat, Z. Banković, P. Lopez-Garcia, M.V. Hermenegildo. *An Evolutionary Scheduling Approach for Trading-off Accuracy vs. Verifiable Energy in Multicore Processors*. Logic Journal of the IGPL, Vol. 25, Num. 6, pages 1006–1019, Oxford Academic Press, December 2017.
7. P. Lopez-Garcia, M. Klemen, U. Liqat, M.V. Hermenegildo. *A General Framework for Static Profiling of Parametric Resource Usage*. Theory and Practice of Logic Programming, 32nd Int'l. Conference on Logic Programming (ICLP'16) Special Issue, Vol. 16, Num. 5-6, pages 849–865, Cambridge U. Press, September 2016.
8. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Practical Run-time Checking via Unobtrusive Property Caching*. Theory and Practice of Logic Programming, 31st Int'l. Conference on Logic Programming (ICLP'15) Special Issue, Vol. 15, Num. 04-05, pages 726–741, Cambridge U. Press, September 2015. <https://arxiv.org/abs/1507.05986>.
9. A. Serrano, P. Lopez-Garcia, M.V. Hermenegildo. *Resource Usage Analysis of Logic Programs via Abstract Interpretation Using Sized Types*. Theory and Practice of Logic Programming, 30th Int'l. Conference on Logic Programming (ICLP'14) Special Issue, Vol. 14, Num. 4-5, pages 739–754, Cambridge U. Press, July 2014.
10. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *An Overview of Ciao and its Design Philosophy*. Theory and Practice of Logic Programming, Vol. 12, Num. 1–2, pages 219–252, Cambridge University Press, January 2012.

11. A. Stivala, P. J. Stuckey, M. García de la Banda, M.V. Hermenegildo, A. Wirth. *Lock-free Parallel Dynamic Programming*. Journal of Parallel and Distributed Computing, Vol. 70, Num. 8, pages 839–848, Elsevier, 2010.
12. P. Lopez-Garcia, F. Bueno, M.V. Hermenegildo. *Automatic Inference of Determinacy and Mutual Exclusion for Logic Programs Using Mode and Type Analyses*. New Generation Computing, Vol. 28, Num. 2, pages 117–206, Ohmsha, Ltd. and Springer, 2010.
13. M.V. Hermenegildo, G. Puebla, F. Bueno, P. Lopez-Garcia. *Integrated Program Debugging, Verification, and Optimization Using Abstract Interpretation (and The Ciao System Preprocessor)*. Science of Computer Programming, Vol. 58, Num. 1–2, pages 115–140, Elsevier North-Holland, October 2005.
14. G. Gupta, E. Pontelli, K. Ali, M. Carlsson, M.V. Hermenegildo. *Parallel Execution of Prolog Programs: a Survey*. ACM Transactions on Programming Languages and Systems, Vol. 23, Num. 4, pages 472–602, ACM Press, July 2001.
15. M.V. Hermenegildo, M. Carro. *Relating Data-Parallelism and (And-) Parallelism in Logic Programs*. The Computer Languages Journal, Vol. 22, Num. 2/3, pages 143–163, Elsevier Science, July 1996.
16. P. Lopez-Garcia, M.V. Hermenegildo, S. K. Debray. *A Methodology for Granularity Based Control of Parallelism in Logic Programs*. Journal of Symbolic Computation, Special Issue on Parallel Symbolic Computation, Vol. 21, Num. 4–6, pages 715–734, Academic Press, 1996.

Articles in Refereed Conferences:

1. Louis Rustenholz, Pedro Lopez-Garcia, José F. Morales, Manuel V. Hermenegildo. *An Order Theory Framework of Recurrence Equations for Static Cost Analysis - Dynamic Inference of Non-Linear Inequality Invariants*. Proceedings of the 31st Static Analysis Symposium (SAS 2024), LNCS, Vol. 14995, pages 352–385, Springer, October 2024.
2. M. Klemen, P. Lopez-Garcia, J. Gallagher, J.F. Morales, M.V. Hermenegildo. *A General Framework for Static Cost Analysis of Parallel Logic Programs*. Post-Proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), LNCS, Vol. 12042, pages 19–35, Springer-Verlag, April 2020.
3. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Incremental Analysis of Logic Programs with Assertions and Open Predicates*. Proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), LNCS, Vol. 12042, pages 36–56, Springer, 2020.
4. U. Liqat, Z. Banković, P. Lopez-Garcia, M.V. Hermenegildo. *Inferring Energy Bounds via Static Program Analysis and Evolutionary Modeling of Basic Blocks*. Logic-Based Program Synthesis and Transformation - 27th International Symposium, LOPSTR 2017, Namur, Belgium, October 10-12, 2017, Revised Selected Papers, Lecture Notes in Computer Science, Vol. 10855, Springer, 2018.
5. Z. Banković, U. Liqat, P. Lopez-Garcia. *A Practical Approach for Energy Efficient Scheduling in Multicore Environments by combining Evolutionary and YDS Algorithms with Faster Energy Estimation*. The 11th International Conference on Artificial Intelligence Applications and Innovations (AIAI'15), IFIP Advances in Information and Communication Technology, Vol. 458, pages 478–493, Springer, 2015.

6. Z. Banković, U. Liqat, P. Lopez-Garcia. *Trading-off Accuracy vs. Energy in Multicore Processors via Evolutionary Algorithms Combining Loop Perforation and Static Analysis-based Scheduling*. Hybrid Artificial Intelligent Systems (HAIS 2015), Lecture Notes in Computer Science, Vol. 9121, pages 690–701, Springer International Publishing, 2015.
7. Z. Banković, P. Lopez-Garcia. *Improved Energy-aware Stochastic Scheduling based on Evolutionary Algorithms via Copula-based Modeling of Task Dependences*. International Conference on Soft Computing Models in Industrial and Environmental Applications (SOCO 2015), Advances in Intelligent Systems and Computing, Vol. 368, pages 153–163, Springer International Publishing, 2015.
8. Z. Banković, P. Lopez-Garcia. *Energy Efficient Allocation and Scheduling for DVFS-enabled Multicore Environments using a Multiobjective Evolutionary Algorithm*. Genetic and Evolutionary Computation Conference (GECCO 2015), pages 1353–1354, ACM, 2015.
9. U. Liqat, S. Kerrison, A. Serrano, K. Georgiou, P. Lopez-Garcia, N. Grech, M.V. Hermenegildo, K. Eder. *Energy Consumption Analysis of Programs based on XMOS ISA-Level Models*. Logic-Based Program Synthesis and Transformation, 23rd International Symposium, LOPSTR 2013, Revised Selected Papers, Lecture Notes in Computer Science, Vol. 8901, pages 72–90, Springer, 2014.
10. A. Serrano, P. Lopez-Garcia, F. Bueno, M.V. Hermenegildo. *Sized Type Analysis for Logic Programs*. Vol. 13, Num. 4-5, pages 1–14, Cambridge U. Press, August 2013.
11. Z. Banković, P. Lopez-Garcia. *Genetic Algorithm-based Allocation and Scheduling for Voltage and Frequency Scalable XMOS Chips*. Hybrid Artificial Intelligent Systems (HAIS 2013), Lecture Notes in Computer Science, Vol. 8073, pages 401–410, Springer, 2013.
12. A. M. Ben-Amram, S. Genaim, A. N. Masud. *On the Termination of Integer Loops*. Verification, Model Checking, and Abstract Interpretation - 13th International Conference, VMCAI 2012, Philadelphia, USA, January 25-27, 2012. Proceedings, Lecture Notes in Computer Science, Vol. 7148, pages 72–87, Springer, January 2012.
13. E. Albert, S. Genaim, A. N. Masud. *More Precise yet Widely Applicable Cost Analysis*. 12th Verification, Model Checking, and Abstract Interpretation (VMCAI'11), Lecture Notes in Computer Science, Vol. 6538, pages 38–53, Springer Verlag, January 2011.
14. T. Trigo, P. Lopez-Garcia, S. Muñoz-Hernandez. *Towards Fuzzy Granularity Control in Parallel/Distributed Computing*. International Conference on Fuzzy Computation (ICFC 2010), pages 43–55, SciTePress, October 2010.
15. E. Albert, S. Genaim, M. Gómez-Zamalloa. *Parametric Inference of Memory Requirements for Garbage Collected Languages*. 9th International Symposium on Memory Management (ISMM'10), pages 121–130, ACM Press, June 2010.
16. E. Albert, P. Arenas, S. Genaim, M. Gómez-Zamalloa, G. Puebla, D. Ramírez, G. Román, D. Zanardini. *Termination and Cost Analysis with COSTA and its User Interfaces*. Spanish Conference on Programming and Computer Languages (PROLE'09), ENTCS, Vol. 248, pages 109–121, Elsevier, September 2009.
17. G. Marpons, J. Mariño, M. Carro, A. Herranz, L.Å. Fredlund, J.J. Moreno-Navarro, A. Polo. *A Coding Rule Conformance Checker Integrated into GCC*. Spanish Conference on Programming and Computer Languages (PROLE'09), ENTCS, Vol. 258, pages 149–159, Elsevier, August 2009.
18. E. Albert, S. Genaim, M. Gómez-Zamalloa. *Live Heap Space Analysis for Languages with Garbage Collection*. 8th international symposium on Memory management, pages 129–138, ACM Press, June 2009.

19. E. Mera, P. Lopez-Garcia, M. Carro, M.V. Hermenegildo. *Towards Execution Time Estimation in Abstract Machine-Based Languages*. 10th Int'l. ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming (PPDP'08), pages 174–184, ACM Press, July 2008.
20. Elvira Albert, Puri Arenas, Samir Genaim, German Puebla. *Automatic Inference of Upper Bounds for Recurrence Relations in Cost Analysis*. Static Analysis, 15th International Symposium, SAS 2008, Valencia, Spain, July 15-17, 2008, Proceedings, Lecture Notes in Computer Science, Vol. 5079, pages 221–237, Springer-Verlag, July 2008.
21. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Zanardini. *Removing Useless Variables in Cost Analysis of Java Bytecode*. ACM Symposium on Applied Computing (SAC) - Software Verification Track (SV08), pages 368–375, ACM Press, New York, March 2008.
22. E. Albert, P. Arenas, S. Genaim, G. Puebla. *Cost Relation Systems: a Language-Independent Target Language for Cost Analysis*. 8th Spanish Conference on Programming and Computer Languages (PROLE'08), Electronic Notes in Theoretical Computer Science, Vol. 17615, Elsevier, 2008.
23. E. Albert, S. Genaim, M. Gómez-Zamalloa. *Heap Space Analysis for Java Bytecode*. Proceedings of the 6th International Symposium on Memory Management (ISMM'07), pages 105–116, ACM Press, October 2007.
24. J. Navas, E. Mera, P. Lopez-Garcia, M.V. Hermenegildo. *User-Definable Resource Bounds Analysis for Logic Programs*. 23rd International Conference on Logic Programming (ICLP'07), Lecture Notes in Computer Science, Vol. 4670, pages 348–363, Springer, September 2007. **10-year Test of Time Award.**
25. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Zanardini. *Cost Analysis of Java Bytecode*. 16th European Symposium on Programming, ESOP'07, Lecture Notes in Computer Science, Vol. 4421, pages 157–172, Springer, March 2007.
26. E. Mera, P. Lopez-Garcia, G. Puebla, M. Carro, M.V. Hermenegildo. *Combining Static Analysis and Profiling for Estimating Execution Times*. Ninth International Symposium on Practical Aspects of Declarative Languages (PADL'07), LNCS, Num. 4354, pages 140–154, Springer-Verlag, January 2007.
27. H. Soza, M. Carro, P. Lopez-Garcia. *Probabilistic Cost Analysis of Logic Programs: A First Case Study*. XXXII Latin-American Conference on Informatics, August 2006.
28. E. Mera, P. Lopez-Garcia, G. Puebla, M. Carro, M.V. Hermenegildo. *Using Combined Static Analysis and Profiling for Logic Program Execution Time Estimation*. 22nd International Conference on Logic Programming (ICLP'06), LNCS, Num. 4079, pages 431–432, Springer-Verlag, August 2006.
29. P. Lopez-Garcia, F. Bueno, M.V. Hermenegildo. *Determinacy Analysis for Logic Programs Using Mode and Type Information*. Proceedings of the 14th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'04), LNCS, Num. 3573, pages 19–35, Springer-Verlag, August 2005.
30. F. Bueno, P. Lopez-Garcia, M.V. Hermenegildo. *Multivariate Non-Failure Analysis via Standard Abstract Interpretation*. 7th International Symposium on Functional and Logic Programming (FLOPS 2004), LNCS, Num. 2998, pages 100–116, Springer-Verlag, April 2004.
31. S. K. Debray, P. Lopez-Garcia, M.V. Hermenegildo, N.-W. Lin. *Lower Bound Cost Estimation for Logic Programs*. 1997 International Logic Programming Symposium, pages 291–305, MIT Press, Cambridge, MA, October 1997.

32. S.K. Debray, P. Lopez-Garcia, M.V. Hermenegildo. *Non-Failure Analysis for Logic Programs*. 1997 International Conference on Logic Programming, pages 48–62, MIT Press, Cambridge, MA, June 1997.
33. M.V. Hermenegildo, M. Carro. *Relating Data-Parallelism and And-Parallelism in Logic Programs*. Proceedings of EURO-PAR'95, LNCS, Num. 966, pages 27–42, Springer-Verlag, August 1995.
34. P. Lopez-Garcia, M.V. Hermenegildo. *Efficient Term Size Computation for Granularity Control*. International Conference on Logic Programming, pages 647–661, MIT Press, Cambridge, MA, June 1995.
35. P. Lopez-Garcia, M.V. Hermenegildo, S.K. Debray. *Towards Granularity Based Control of Parallelism in Logic Programs*. Proc. of First International Symposium on Parallel Symbolic Computation, PASCOS'94, pages 133–144, World Scientific, September 1994.
36. S. K. Debray, N.-W. Lin, M.V. Hermenegildo. *Task Granularity Analysis in Logic Programs*. Proc. 1990 ACM Conf. on Programming Language Design and Implementation (PLDI), pages 174–188, ACM Press, June 1990.

Books and Monographs:

1. Pérez Carrasco, Víctor. *Improvements to Parametric Cost Analysis and its Application to Smart Contracts*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 63 pages, July 2021. MSc Thesis.
2. Pérez Carrasco, Víctor. *Analysis of Smart Contracts using Horn Clauses*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 76 pages, June 2020. BSc Thesis.
3. M. Klemen. *Improved Static Analysis and Verification of Energy Consumption and other Resources via Abstract Interpretation*. Ms. Thesis, Technical University of Madrid, ETSI Informatica, E-28660, Boadilla del Monte, Madrid, Spain, 88 pages, July 2015.
4. E. Mera. *A Unified Framework for Resource and Execution Time Analysis, Run-Time Checking and Unit-Testing*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informática UPM, 28660-Boadilla del Monte, Madrid-Spain, November 2010.
5. M. Teresa Trigo de la Vega. *Fuzzy Granularity Control in Parallel/Distributed Computing*. Ms. Thesis, Technical University of Madrid, School of Computer Science, E-28660, Boadilla del Monte, Madrid, Spain, 66 pages, September 2010.
6. P. Lopez-Garcia. *Non-failure Analysis and Granularity Control in Parallel Execution of Logic Programs*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informatica UPM, 28660-Boadilla del Monte, Madrid-Spain, June 2000.
7. P. Lopez-Garcia. *A System of Granularity Control in Parallel Logic Programs*. Ms. Thesis, T. University of Madrid (UPM), Facultad de Informática, Madrid, 28660, December 1993.

Invited Papers and Tutorials:

1. M.V. Hermenegildo, I. Garcia-Contreras, J.F. Morales, P. Lopez-Garcia, L. Rustenholz, D. Ferreiro, D. Jurjo. *On-the-fly Verification via (Incremental, Interactive) Abstract Interpretation with CiaoPP and Verify*. October 2023. Keynote at LOPSTR'23/SPLASH'23. Video available [here](#).
2. M.V. Hermenegildo. *50-Years of Prolog and Beyond (invited talk)*. November 2022. Keynote given at the Prolog 50th Anniversary 'Prolog Day Symposium'.

3. M.V. Hermenegildo. *Some reflections on Prolog's evolution, status, and future on the 50th anniversary of the birth of Prolog (abstract of invited talk)*. 38th International Conference on Logic Programming (ICLP'22 at FLoC'22), August 2022.
4. M.V. Hermenegildo, P. Lopez-Garcia, J.F. Morales, V. Perez-Carrasco. *Analysis and Verification of the Resource Consumption of Tezos Contracts*. March 2022. Nomadic Labs Research Seminars #28.
5. V. Perez-Carrasco, M. Klemen, P. Lopez-Garcia, J.F. Morales, M.V. Hermenegildo. *Cost Analysis of Smart Contracts via Parametric Resource Analysis*. Proceedings of the 27th Static Analysis Symposium (SAS 2020), LNCS, Vol. 12389, pages 7–31, Springer, November 2020. Keynote at SAS'2020. Video available at SPLASH site.
6. M.V. Hermenegildo, M. Carro, P. Lopez-Garcia, J.F. Morales, J. Arias, I. Garcia-Contreras, M. Klemen, N. Stulova. *25 Years of Ciao (abstract of invited tutorial)*. Pre-proceedings of the 28th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'18), September 2018. Talk slides at https://cliplab.org/papers/ciao_tut_1opstr18.pdf.
7. M.V. Hermenegildo, P. Lopez-Garcia, U. Liqat, M. Klemen. *Energy Consumption Analysis and Verification by Transformation into Horn Clauses and Abstract Interpretation*. 5th International Workshop on Verification and Program Transformation (VPT 2017), Vol. 253, pages 4–6, EPTCS, April 2017. (Abstract of invited talk).
8. M.V. Hermenegildo, F. Bueno, A. Casas, J. Navas, E. Mera, M. Carro, P. Lopez-Garcia. *Automatic Granularity-Aware Parallelization of Programs with Predicates, Functions, and Constraints*. DAMP'07, ACM SIGPLAN Workshop on Declarative Aspects of Multicore Programming, pages 1–1, ACM, January 2007. (abstract of invited talk).
9. M.V. Hermenegildo, E. Albert, P. Lopez-Garcia, G. Puebla. *Abstraction Carrying Code and Resource-Awareness*. 7th ACM-SIGPLAN International Symposium on Principles and Practice of Declarative Programming (PPDP'05), pages 1–11, ACM Press, July 2005.
10. M.V. Hermenegildo, E. Albert, P. Lopez-Garcia, G. Puebla. *Some Techniques for Automated, Resource-Aware Distributed and Mobile Computing in a Multi-Paradigm Programming System*. Proc. of EURO-PAR 2004, LNCS, Num. 3149, pages 21–37, Springer-Verlag, August 2004.
11. M.V. Hermenegildo, G. Puebla, F. Bueno, P. Lopez-Garcia. *Program Development Using Abstract Interpretation (and The Ciao System Preprocessor)*. 10th International Static Analysis Symposium (SAS'03), LNCS, Num. 2694, pages 127–152, Springer-Verlag, June 2003.
12. M.V. Hermenegildo, F. Bueno, G. Puebla, P. Lopez-Garcia. *Program Analysis, Debugging and Optimization Using the Ciao System Preprocessor*. 1999 Int'l. Conference on Logic Programming, pages 52–66, MIT Press, November 1999.
13. M.V. Hermenegildo. *Automatic Parallelization of Irregular and Pointer-Based Computations: Perspectives from Logic and Constraint Programming*. Proceedings of EUROPAR'97, LNCS, Vol. 1300, pages 31–46, Springer-Verlag, August 1997.
14. S.K. Debray, P. Lopez-Garcia, M.V. Hermenegildo, N.-W. Lin. *Estimating the Computational Cost of Logic Programs*. Static Analysis Symposium, SAS'94, LNCS, Num. 864, pages 255–265, Springer-Verlag, September 1994.

Articles in Books and Other Collections:

1. P. Lopez-Garcia, M.V. Hermenegildo, M. Klemen, U. Liqat. *Energy Consumption Analysis and Verification using CiaoPP*. The ALP Newsletter, Vol. 30, Num. 3, The Association for Logic Programming, September 2017.
2. U. Liqat, K. Georgiou, S. Kerrison, P. Lopez-Garcia, M.V. Hermenegildo, J. P. Gallagher, K. Eder. *Inferring Parametric Energy Consumption Functions at Different Software Levels: ISA vs. LLVM IR*. Foundational and Practical Aspects of Resource Analysis: 4th International Workshop, FOPARA 2015, London, UK, April 11, 2015. Revised Selected Papers, Lecture Notes in Computer Science, Vol. 9964, pages 81–100, Springer, 2016.
3. K. Georgiou, U. Liqat. *Towards LLVM-Based Energy Consumption Analysis of Programs*. ICT-Energy (Nanoenergy) Letters, Num. 8, pages 16–17, July 2014.
4. T. Trigo, P. Lopez-Garcia, S. Muñoz-Hernandez. *A Fuzzy Approach to Resource Aware Automatic Parallelization*. Computational Intelligence, Studies in Computational Intelligence (SCI), Vol. 399, pages 229–245, Springer Berlin Heidelberg, 2012.
5. M. Carro, M.V. Hermenegildo. *Logic Languages*. Encyclopedia of Parallel Computing, pages 1057–1068, Springer, 2011.
6. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, J.F. Morales, G. Puebla. *An Overview of The Ciao Multiparadigm Language and Program Development Environment and its Design Philosophy*. Festschrift for Ugo Montanari, LNCS, Vol. 5065, pages 209–237, Springer-Verlag, June 2008.

Publications in Refereed Workshops:

1. M. Klemen, M.Á. Carreira-Perpiñán, P. Lopez-Garcia. *Solving Recurrence Relations using Machine Learning, with Application to Cost Analysis*. Technical Communications of the 39th International Conference on Logic Programming (ICLP 2023), Electronic Proceedings in Theoretical Computer Science (EPTCS), Vol. 385, pages 155–168, Open Publishing Association (OPA), July 2023.
2. Bishoksan Kaffe, John P. Gallagher, Manuel V. Hermenegildo, Maximiliano Klemen, Pedro Lopez-Garcia, José F. Morales. *Regular Path Clauses and their Application in Solving Loops*. Proceedings of the Eighth International Workshop on Horn Clauses for Verification and Synthesis (HCVS 2021), Electronic Proceedings in Theoretical Computer Science (EPTCS), Vol. 344, pages 22–35, Open Publishing Association (OPA), August 2021. Co-located with ETAPS 2021.
3. M. A. Sanchez-Ordaz, I. Garcia-Contreras, V. Perez-Carrasco, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *VeriFly: On-the-fly Assertion Checking with CiaoPP*. 6th Workshop on Formal Integrated Development Environment (F-IDE 2021, part of NASA NFM’21), Electronic Proceedings in Theoretical Computer Science (EPTCS), pages 1–5, Open Publishing Association (OPA), May 2021. Co-located with ETAPS 2021.
4. M. Klemen, P. Lopez-Garcia, J. Gallagher, J.F. Morales, M.V. Hermenegildo. *A General Framework for Static Cost Analysis of Parallel Logic Programs*. Pre-proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR’19), November 2019.
5. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Incremental Analysis of Logic Programs with Assertions and Open Predicates*. Pre-proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR’19), October 2019.

6. M. Klemen, P. Lopez-Garcia, J. Gallagher, J.F. Morales, M.V. Hermenegildo. *Towards a General Framework for Static Cost Analysis of Parallel Logic Programs*. Technical Communications of the 35th International Conference on Logic Programming (ICLP 2019), Electronic Proceedings in Theoretical Computer Science (EPTCS), pages 238–240, Open Publishing Association (OPA), September 2019. (Extended Abstract).
7. P. Lopez-Garcia, M. Klemen, U. Liqat, M.V. Hermenegildo. *A General Framework for Static Profiling of Parametric Resource Usage (extended abstract)*. 19th International Workshop on Logic and Computational Complexity (LCC 2018), 4 pages, July 2018. Associated to FLOC 2018.
8. M. Klemen, N. Stulova, P. Lopez-Garcia, J. F. Morales, M.V. Hermenegildo. *Towards Static Performance Guarantees for Programs with Run-time Checks*. Technical Communications of the 34th International Conference on Logic Programming (ICLP 2018), OpenAccess Series in Informatics (OASICs), 2 pages, July 2018. (Extended Abstract).
9. U. Liqat, Z. Banković, P. Lopez-Garcia, M.V. Hermenegildo. *Inferring Energy Bounds via Static Program Analysis and Evolutionary Modeling of Basic Blocks*. Pre-proceedings of the 27th International Symposium on Logic-Based Program Synthesis and Transformation (LOPSTR'17), October 2017. arXiv:1601.02800.
10. U. Liqat, Z. Banković, P. Lopez-Garcia, M.V. Hermenegildo. *Inferring Energy Bounds Statically by Evolutionary Analysis of Basic Blocks*. Workshop on High Performance Energy Efficient Embedded Systems (HIP3ES 2016), 2016. arXiv:1601.02800.
11. R. Haemmerle, M.V. Hermenegildo, M. Klemen, U. Liqat, P. Lopez-Garcia. *Energy Analysis and Verification by Translation to Horn Clauses and Abstract Interpretation*. Workshop on Horn Clauses for Verification and Synthesis (HCVS'2015), July 2015.
12. P. Lopez-Garcia, R. Haemmerlé, M. Klemen, U. Liqat, M.V. Hermenegildo. *Towards Energy Consumption Verification via Static Analysis*. Workshop on High Performance Energy Efficient Embedded Systems (HIP3ES), arXiv:1501.03064, 11 pages, 2015. arXiv:1512.09369.
13. U. Liqat, S. Kerrison, A. Serrano, K. Georgiou, P. Lopez-Garcia, N. Grech, M.V. Hermenegildo, K. Eder. *Energy Consumption Analysis of Programs based on XMOS ISA-Level Models*. Pre-proceedings of the 23rd International Symposium on Logic-Based Program Synthesis and Transformation (LOPSTR'13), September 2013.
14. A. Serrano, P. Lopez-Garcia, M.V. Hermenegildo. *Towards an Abstract Domain for Resource Analysis of Logic Programs Using Sized Types*. 23rd Workshop on Logic-based Methods in Programming Environments (WLPE 2013), 15 pages, August 2013. CoRR abs/1308.3940.
15. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *The Ciao Approach to the Dynamic vs. Static Language Dilemma*. Proceedings for the International Workshop on Scripts to Programs (STOP'11), 4 pages, ACM, 2011.
16. J. Navas, M. Méndez-Lojo, M.V. Hermenegildo. *User-Definable Resource Usage Bounds Analysis for Java Bytecode*. Vol. 253, Num. 5, pages 65–82, Elsevier - North Holland, March 2009.
17. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Ramírez, D. Zanardini. *Upper Bounds of Resource Usage for Java Bytecode using COSTA and its Web Interface*. Workshop on Resource Analysis, September 2008.
18. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Ramírez, D. Zanardini. *The COSTA Cost and Termination Analyzer for Java Bytecode and its Web Interface (Tool Demo)*. 22nd European Conference on Object-Oriented Programming (ECOOP'08), July 2008.

19. J. Navas, M. Méndez-Lojo, M.V. Hermenegildo. *Safe Upper-bounds Inference of Energy Consumption for Java Bytecode Applications*. The Sixth NASA Langley Formal Methods Workshop (LFM 08), pages 29–32, April 2008. Extended Abstract.
20. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Zanardini. *COSTA: A Cost and Termination Analyzer for Java Bytecode*. Proceedings of the Workshop on Bytecode Semantics, Verification, Analysis and Transformation (BYTECODE’08), Electronic Notes in Theoretical Computer Science, Elsevier, April 2008.
21. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Zanardini. *A Generic Framework for the Cost Analysis of Java Bytecode*. Spanish Conference on Programming and Computer Languages (PROLE’07), September 2007.
22. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Zanardini. *Applications of Static Slicing in Cost Analysis of Java Bytecode*. 3rd International Workshop on Programming Language Interference and Dependence (PLID’07), August 2007.
23. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Zanardini. *Experiments in Cost Analysis of Java Bytecode*. ETAPS Workshop on Bytecode Semantics, Verification, Analysis and Transformation (BYTECODE’07), Electronic Notes in Theoretical Computer Science, Vol. 190, Issue 1, Elsevier, 2007.
24. E. Mera, P. Lopez-Garcia, G. Puebla, M. Carro, M.V. Hermenegildo. *Towards Execution Time Estimation for Logic Programs via Static Analysis and Profiling*. 16th Workshop on Logic Programming Environments, pages 45–60, University of Namur, Institut d’Informatique, August 2006.
25. M.V. Hermenegildo, M. Carro. *A Note on Data-Parallelism and (And-Parallel) Prolog*. ICLP WS on Parallel and Data Parallel Execution of Logic Programs, 16 pages, June 1994.
26. M.V. Hermenegildo, The CLIP Group. *Some Methodological Issues in the Design of CIAO - A Generic, Parallel Concurrent Constraint System*. Proc. of the 1994 ICOT/NSF Workshop on Parallel and Concurrent Programming, U. of Oregon, March 1994.
27. P. Lopez-Garcia, M.V. Hermenegildo. *Towards Dynamic Term Size Computation via Program Transformation*. Second Spanish Conference on Declarative Programming, pages 73–93, IIIA/CSIC, September 1993.

Technical Reports and Manuals:

1. F. Ridoux. *Improvements to the Auxiliary Analyses for Cost Analysis*. CLIP Lab, IMDEA Software Institute, August 2024. Master internship report. Supervised by P. Lopez-Garcia, M.V. Hermenegildo, J. F. Morales and L. Rustenholz..
2. Louis Rustenholz, Pedro Lopez-Garcia, José F. Morales, Manuel V. Hermenegildo. *An Order Theory Framework of Recurrence Equations for Static Cost Analysis - Dynamic Inference of Non-Linear Inequality Invariants*. Num. CLIP-1/2024.0, IMDEA Software Institute and Technical University of Madrid (UPM), May 2024.
3. Louis Rustenholz, Maximiliano Klemen, Miguel Ángel Carreira-Perpiñán, Pedro López-García. *A Machine Learning-based Approach for Solving Recurrence Relations and its use in Cost Analysis of Logic Programs*. 2024.
4. L. Rustenholz. *Automated Approximate Recurrence Solving applied to Static Analysis of Energy Consumption*. CLIP Lab, IMDEA Software Institute, August 2022. Master internship report. Supervised by M.V. Hermenegildo, P. Lopez-Garcia, and J. F. Morales.

5. M.A. Sanchez-Ordaz, I. Garcia-Contreras, V. Perez-Carrasco, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *VeriFly: On-the-fly Assertion Checking via Incrementality*. Num. CLIP-1/2021.0, 21 pages, The CLIP Lab, IMDEA Software Institute and T.U. Madrid, May 2021.
6. M. Klemen, P. Lopez-Garcia, J. Gallagher, J.F. Morales, M.V. Hermenegildo. *Towards a General Framework for Static Cost Analysis of Parallel Logic Programs*. Num. CLIP-1/2019.0, 19 pages, The CLIP Lab, IMDEA Software Institute and T.U. Madrid, July 2019.
7. M. Klemen, N. Stulova, P. Lopez-Garcia, J. F. Morales, M.V. Hermenegildo. *An Approach to Static Performance Guarantees for Programs with Run-time Checks*. Num. CLIP-1/2018.0, 15 pages, The CLIP Lab, IMDEA Software Institute and T.U. Madrid, April 2018.
8. P. Lopez-Garcia, R. Haemmerlé, U. Liqat, M. Klemen, M.V. Hermenegildo. *Parametric Static Profiling*. Num. CLIP-2/2015.0, The CLIP Lab, April 2015.
9. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *An Overview of Ciao and its Design Philosophy*. Num. CLIP2/2010.0, Technical University of Madrid (UPM), March 2010. Under consideration for publication in *Theory and Practice of Logic Programming (TPLP)*.
10. P. Lopez-Garcia, F. Bueno, M.V. Hermenegildo. *Inferring Determinacy and Mutual Exclusion in Logic Programs Using Mode and Type Analysis*. Num. CLIP2/2009.0, Technical University of Madrid (UPM), February 2009.
11. J. Navas, E. Mera, P. Lopez-Garcia, M.V. Hermenegildo. *Inference of User-Definable Resource Bounds Usage for Logic Programs and its Applications*. Num. CLIP5/2008.0, Technical University of Madrid (UPM), July 2008.
12. M.V. Hermenegildo, E. Albert, P. Arenas, F. Bueno, M. Carro, A. Casas, P. Chico de Guzmán, J. Correas, S. Genaim, J. Lipton, Pedro Lopez-Garcia, M. Méndez, E. Mera, J. Morales, J. Navas, R. Padilla, P. Pietrzak, G. Puebla, M. Zamalloa, D. Zanardini. *Rigorous Methods for Mobile and Heterogeneous Software Systems – Second Year Report*. Num. CLIP3/2008.0, Technical University of Madrid (UPM), April 2008.
13. J. Navas, M. Méndez-Lojo, M.V. Hermenegildo. *Customizable Resource Usage Analysis for Java Bytecode*. Num. UNM TR-CS-2008-02 - CLIP1/2008.0, University of New Mexico, January 2008.
14. E. Mera, P. Lopez-Garcia, M. Carro, M.V. Hermenegildo. *Towards Execution Time Estimation in Abstract Machine-Based (Logic) Languages*. Num. CLIP8/2007.0, Technical University of Madrid (UPM), August 2007.
15. E. Albert, P. Arenas, S. Genaim, G. Puebla. *Automatic Inference of Upper Bounds for Cost Equation Systems*. Num. CLIP10/2007.0, Technical University of Madrid, July 2007.
16. M.V. Hermenegildo, E. Albert, P. Arenas, A. Beascoa, F. Bueno, D. Cabeza, M. Carro, J. Correas, A. García Pañoso, J. Lipton, P. Lopez-Garcia, E. Mera, J. Morales, C. Ochoa, G. Puebla. *Rigorous Methods for Mobile and Heterogeneous Software Systems – First Year Report*. Num. CLIP4/2007.0, Technical University of Madrid (UPM), March 2007.
17. P. Lopez-Garcia, F. Bueno, M.V. Hermenegildo. *Inferring Determinacy in Logic Programs Using Mode and Type Information*. Num. CLIP3/2007.0, Technical University of Madrid (UPM), February 2007.
18. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Zanardini. *Automatic Cost Analysis of Java Bytecode*. Num. CLIP10/2006.0, Technical University of Madrid, December 2006.

19. J. Navas, E. Mera, P. Lopez-Garcia, M.V. Hermenegildo. *Resource Bounds Analysis*. Num. CLIP6/2006.0, 19 pages, Technical University of Madrid (UPM), November 2006.
20. E. Mera, P. Lopez-Garcia, G. Puebla, M. Carro, M.V. Hermenegildo. *Towards Combining Static Analysis and Profiling for Estimating Execution Times in Logic Programs*. Num. CLIP5/2006.0, 15 pages, Technical University of Madrid (UPM), April 2006.
21. E. Mera. *Estimación de los coeficientes del análisis de complejidad mediante técnicas estadísticas*. Num. CLIP14/2004.0, Technical University of Madrid, September 2004.
22. S.K. Debray, P. Lopez-Garcia, M.V. Hermenegildo. *Towards Precise Non-Failure Analysis for Logic Programs*. Num. CLIP18/96.0, T.U. of Madrid (UPM), November 1996.
23. S.K. Debray, P. Lopez-Garcia, M.V. Hermenegildo, N.-W. Lin. *Lower Bound Cost Estimation for Logic Programs*. Num. CLIP20/95.0, T.U. of Madrid (UPM), December 1995.
24. M.V. Hermenegildo, M. Carro. *A Note on Data-Parallelism and (And-Parallel) Prolog*. Num. CLIP 6/94.0, 15 pages, School of Computer Science, Technical University of Madrid (UPM), June 1995.
25. S.K. Debray, P. Lopez-Garcia, M.V. Hermenegildo. *Non-Failure Analysis for Logic Programs*. Num. CLIP14/94.0, T.U. of Madrid (UPM), October 1994.
26. M.V. Hermenegildo, P. Lopez-Garcia. *A Technique for Dynamic Term Size Computation via Program Transformation*. Num. CLIP 8/93.1(94), School of Computer Science, Technical University of Madrid, March 1994.
27. S.K. Debray, P. Lopez-Garcia, M.V. Hermenegildo, N.-W. Lin. *Lower Bound Cost Estimation for Logic Programs*. Num. CLIP4/94.0, T.U. of Madrid (UPM), March 1994.
28. P. Lopez-Garcia, M.V. Hermenegildo. *An Automatic Sequentializer Based on Program Transformation*. T.U. of Madrid (UPM), April 1993.
29. P. Lopez-Garcia, M.V. Hermenegildo. *Dynamic Term Size Computation in Logic Programs via Program Transformation*. Num. CLIP 8/93.0, T.U. of Madrid (UPM), April 1993. Presented at the 1993 COMPULOG Area Meeting on Parallelism and Implementation Technologies.

5 Publications in Analysis of Smart Contracts, Blockchain

Books and Monographs:

1. Pérez Carrasco, Víctor. *Improvements to Parametric Cost Analysis and its Application to Smart Contracts*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 63 pages, July 2021. MSc Thesis.
2. Pérez Carrasco, Víctor. *Analysis of Smart Contracts using Horn Clauses*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 76 pages, June 2020. BSc Thesis.

Invited Papers and Tutorials:

1. V. Perez-Carrasco, M. Klemen, P. Lopez-Garcia, J.F. Morales, M.V. Hermenegildo. *Cost Analysis of Smart Contracts via Parametric Resource Analysis*. Proceedings of the 27th Static Analysis Symposium (SAS 2020), LNCS, Vol. 12389, pages 7–31, Springer, November 2020. Keynote at SAS'2020. Video available at SPLASH site.

6 Publications in Automatic Parallelization

Articles in Refereed Journals:

1. Agostino Dovier, Andrea Formisano, Gopal Gupta, Manuel V. Hermenegildo, Enrico Pontelli, Ricardo Rocha. *Parallel Logic Programming: A Sequel*. Theory and Practice of Logic Programming, 20th Anniversary Special Issue, Vol. 22, Num. 6, pages 905–973, Cambridge U. Press, March 2022.
2. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Some Trade-offs in Reducing the Overhead of Assertion Run-time Checks via Static Analysis*. Science of Computer Programming, Vol. 155, pages 3–26, Elsevier North-Holland, April 2018. Selected and Extended papers from the 2016 International Symposium on Principles and Practice of Declarative Programming.
3. U. Liqat, Z. Banković, P. Lopez-Garcia, M.V. Hermenegildo. *An Evolutionary Scheduling Approach for Trading-off Accuracy vs. Verifiable Energy in Multicore Processors*. Logic Journal of the IGPL, Vol. 25, Num. 6, pages 1006–1019, Oxford Academic Press, December 2017.
4. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *An Overview of Ciao and its Design Philosophy*. Theory and Practice of Logic Programming, Vol. 12, Num. 1–2, pages 219–252, Cambridge University Press, January 2012.
5. D. Cabeza, M. Hermenegildo. *Non-Strict Independence-Based Program Parallelization Using Sharing and Freeness Information*. Theoretical Computer Science, Vol. 410, Num. 46, pages 4704–4723, Elsevier Science, October 2009.
6. M.V. Hermenegildo, G. Puebla, F. Bueno, P. Lopez-Garcia. *Integrated Program Debugging, Verification, and Optimization Using Abstract Interpretation (and The Ciao System Preprocessor)*. Science of Computer Programming, Vol. 58, Num. 1–2, pages 115–140, Elsevier North-Holland, October 2005.
7. G. Gupta, E. Pontelli, K. Ali, M. Carlsson, M.V. Hermenegildo. *Parallel Execution of Prolog Programs: a Survey*. ACM Transactions on Programming Languages and Systems, Vol. 23, Num. 4, pages 472–602, ACM Press, July 2001.
8. M.V. Hermenegildo. *Parallelizing Irregular and Pointer-Based Computations Automatically: Perspectives from Logic and Constraint Programming*. Parallel Computing, Vol. 26, Num. 13–14, pages 1685–1708, Elsevier Science, December 2000.
9. M. García de la Banda, M.V. Hermenegildo, K. Marriott. *Independence in CLP Languages*. ACM Transactions on Programming Languages and Systems, Vol. 22, Num. 2, pages 269–339, ACM Press, March 2000.
10. G. Puebla, M.V. Hermenegildo. *Abstract Multiple Specialization and its Application to Program Parallelization*. J. of Logic Programming. Special Issue on Synthesis, Transformation and Analysis of Logic Programs, Vol. 41, Num. 2&3, pages 279–316, Elsevier - North Holland, November 1999.
11. F. Bueno, M. García de la Banda, M.V. Hermenegildo. *Effectiveness of Abstract Interpretation in Automatic Parallelization: A Case Study in Logic Programming*. ACM Transactions on Programming Languages and Systems, Vol. 21, Num. 2, pages 189–238, ACM Press, March 1999.
12. K. Muthukumar, F. Bueno, M. García de la Banda, M.V. Hermenegildo. *Automatic Compile-time Parallelization of Logic Programs for Restricted, Goal-level, Independent And-parallelism*. Journal of Logic Programming, Vol. 38, Num. 2, pages 165–218, Elsevier - North-Holland, February 1999.

13. F. Bueno, M.V. Hermenegildo, U. Montanari, F. Rossi. *Partial Order and Contextual Net Semantics for Atomic and Locally Atomic CC Programs*. Science of Computer Programming, Vol. 30, pages 51–82, North-Holland, January 1998. Special CCP95 Workshop issue.
14. P. Lopez-Garcia, M.V. Hermenegildo, S. K. Debray. *A Methodology for Granularity Based Control of Parallelism in Logic Programs*. Journal of Symbolic Computation, Special Issue on Parallel Symbolic Computation, Vol. 21, Num. 4–6, pages 715–734, Academic Press, 1996.
15. M.V. Hermenegildo, F. Rossi. *Strict and Non-Strict Independent And-Parallelism in Logic Programs: Correctness, Efficiency, and Compile-Time Conditions*. Journal of Logic Programming, Vol. 22, Num. 1, pages 1–45, Elsevier - North Holland, 1995.
16. M.V. Hermenegildo, R. Warren, S. K. Debray. *Global Flow Analysis as a Practical Compilation Tool*. Journal of Logic Programming, Vol. 13, Num. 4, pages 349–367, Elsevier - North Holland, August 1992.
17. K. Muthukumar, M.V. Hermenegildo. *Compile-time Derivation of Variable Dependency Using Abstract Interpretation*. Journal of Logic Programming, Vol. 13, Num. 2/3, pages 315–347, Elsevier - North-Holland, July 1992.
18. M.V. Hermenegildo, K. Greene. *The \mathcal{E} -Prolog System: Exploiting Independent And-Parallelism*. New Generation Computing, Vol. 9, Num. 3,4, pages 233–257, Springer Verlag, 1991.
19. M.V. Hermenegildo, E. Tick. *Memory Referencing Characteristics and Caching Performance of AND-Parallel Prolog on Shared-Memory Architectures*. New Generation Computing, Vol. 7, Num. 1, pages 37–58, Springer Verlag, October 1989.
20. M.V. Hermenegildo, R. Warren. *Designing a High-Performance Parallel Logic Programming System*. Computer Architecture News, Special Issue on Parallel Symbolic Programming, Vol. 15, Num. 1, pages 43–53, ACM, March 1987.

Articles in Refereed Conferences:

1. M. Klemen, P. Lopez-Garcia, J. Gallagher, J.F. Morales, M.V. Hermenegildo. *A General Framework for Static Cost Analysis of Parallel Logic Programs*. Post-Proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), LNCS, Vol. 12042, pages 19–35, Springer-Verlag, April 2020.
2. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Incremental Analysis of Logic Programs with Assertions and Open Predicates*. Proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), LNCS, Vol. 12042, pages 36–56, Springer, 2020.
3. T. Trigo, P. Lopez-Garcia, S. Muñoz-Hernandez. *Towards Fuzzy Granularity Control in Parallel/Distributed Computing*. International Conference on Fuzzy Computation (ICFC 2010), pages 43–55, SciTePress, October 2010.
4. L. Scandolo, C. Kunz, G. Barthe, M.V. Hermenegildo. *Program Parallelization using Synchronized Pipelining*. Proceedings of the 19th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'09), LNCS, Vol. 6037, pages 173–187, Springer, 2010.
5. M. Marron, D. Kapur, M.V. Hermenegildo. *Identification of Logically Related Heap Regions*. ISMM'09: Proceedings of the 8th international symposium on Memory management, ACM Press, June 2009.

6. M. Marron, M. Méndez-Lojo, M.V. Hermenegildo, D. Stefanovic, D. Kapur. *Sharing Analysis of Arrays, Collections, and Recursive Structures*. ACM WS on Program Analysis for Software Tools and Engineering (PASTE'08), ACM, November 2008.
7. M. Marron, D. Kapur, D. Stefanovic, M.V. Hermenegildo. *Identification of Heap-Carried Data Dependence Via Explicit Store Heap Models*. 21st Int'l. WS on Languages and Compilers for Parallel Computing (LCPC'08), LNCS, Springer-Verlag, August 2008.
8. M. Marron, M.V. Hermenegildo, D. Kapur, D. Stefanovic. *Efficient Context-Sensitive Shape Analysis with Graph-Based Heap Models*. International Conference on Compiler Construction (CC 2008), Lecture Notes in Computer Science, 15 pages, Springer, April 2008.
9. M. Méndez-Lojo, M.V. Hermenegildo. *Precise Set Sharing Analysis for Java-style Programs*. 9th International Conference on Verification, Model Checking and Abstract Interpretation (VMCAI'08), LNCS, Num. 4905, pages 172–187, Springer-Verlag, January 2008.
10. A. Casas, M. Carro, M.V. Hermenegildo. *Annotation Algorithms for Unrestricted Independent And-Parallelism in Logic Programs*. 17th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'07), LNCS, Num. 4915, pages 138–153, Springer-Verlag, August 2007.
11. M. Marron, D. Stefanovic, M.V. Hermenegildo, D. Kapur. *Heap Analysis in the Presence of Collection Libraries*. ACM WS on Program Analysis for Software Tools and Engineering (PASTE'07), ACM, June 2007.
12. M. Marron, D. Kapur, D. Stefanovic, M.V. Hermenegildo. *A Static Heap Analysis for Shape and Connectivity*. Languages and Compilers for Parallel Computing (LCPC'06), Lecture Notes in Computer Science, Vol. 4382, pages 345–363, Springer, November 2006.
13. J. Navas, F. Bueno, M.V. Hermenegildo. *Efficient Top-Down Set-Sharing Analysis Using Cliques*. 8th International Symposium on Practical Aspects of Declarative Languages (PADL'06), LNCS, Num. 2819, pages 183–198, Springer-Verlag, January 2006.
14. G. Puebla, M.V. Hermenegildo. *Abstract Specialization and its Application to Program Parallelization*. Logic Program Synthesis and Transformation, LNCS, Num. 1207, pages 169–186, Springer-Verlag, 1997.
15. M. García de la Banda, F. Bueno, M.V. Hermenegildo. *Towards Independent And-Parallelism in CLP*. Programming Languages: Implementation, Logics, and Programs, LNCS, Num. 1140, pages 77–91, Springer-Verlag, September 1996.
16. M. García de la Banda, M.V. Hermenegildo, K. Marriott. *Independence in Dynamically Scheduled Logic Languages*. 1996 International Conference on Algebraic and Logic Programming, LNCS, Num. 1139, pages 47–61, Springer-Verlag, September 1996.
17. P. Lopez-Garcia, M.V. Hermenegildo. *Efficient Term Size Computation for Granularity Control*. International Conference on Logic Programming, pages 647–661, MIT Press, Cambridge, MA, June 1995.
18. F. Bueno, M. García de la Banda, M.V. Hermenegildo. *Effectiveness of Global Analysis in Strict Independence-Based Automatic Program Parallelization*. International Symposium on Logic Programming, pages 320–336, MIT Press, November 1994.
19. F. Bueno, M.V. Hermenegildo, U. Montanari, F. Rossi. *From Eventual to Atomic and Locally Atomic CC Programs: A Concurrent Semantics*. Fourth International Conference on Algebraic and Logic Programming, LNCS, Num. 850, pages 114–132, Springer-Verlag, September 1994.

20. F. Bueno, M. García de la Banda, M.V. Hermenegildo. *A Comparative Study of Methods for Automatic Compile-time Parallelization of Logic Programs*. First International Symposium on Parallel Symbolic Computation, PASCOS'94, pages 63–73, World Scientific Publishing Company, September 1994.
21. P. Lopez-García, M.V. Hermenegildo, S.K. Debray. *Towards Granularity Based Control of Parallelism in Logic Programs*. Proc. of First International Symposium on Parallel Symbolic Computation, PASCOS'94, pages 133–144, World Scientific, September 1994.
22. D. Cabeza, M.V. Hermenegildo. *Extracting Non-Strict Independent And-Parallelism Using Sharing and Freeness Information*. 1994 International Static Analysis Symposium, LNCS, Num. 864, pages 297–313, Springer-Verlag, September 1994.
23. U. Montanari, F. Rossi, F. Bueno, M. García de la Banda, M.V. Hermenegildo. *Towards a Concurrent Semantics-based Analysis of CC and CLP*. Principles and Practice of Constraint Programming, LNCS, Num. 874, pages 151–161, Springer-Verlag, May 1994.
24. M. García de la Banda, M.V. Hermenegildo, K. Marriott. *Independence in Constraint Logic Programs*. 1993 International Logic Programming Symposium, pages 130–146, MIT Press, Cambridge, MA, October 1993.
25. M. Olmedilla, F. Bueno, M.V. Hermenegildo. *Automatic Exploitation of Non-Determinate Independent And-Parallelism in the Basic Andorra Model*. Logic Program Synthesis and Transformation, 1993, Workshops in Computing, pages 177–195, Springer-Verlag, July 1993.
26. M. Carro, L. Gómez, M.V. Hermenegildo. *Some Paradigms for Visualizing Parallel Execution of Logic Programs*. 1993 International Conference on Logic Programming, pages 184–201, MIT Press, June 1993.
27. H. Kuchen, J. Moreno-Navarro, M.V. Hermenegildo. *Independent AND-Parallel Implementation of Narrowing*. Proc. 4th Int'l. Symposium on Programming Language Implementation and Logic Programming, LNCS, Num. 631, pages 24–38, Springer-Verlag, August 1992.
28. F. Bueno, M.V. Hermenegildo. *An Automatic Translation Scheme from Prolog to the Andorra Kernel Language*. Proc. of the 1992 International Conference on Fifth Generation Computer Systems, Vol. 2, pages 759–769, Institute for New Generation Computer Technology (ICOT), June 1992.
29. K. Shen, M.V. Hermenegildo. *A Simulation Study of Or- and Independent And-parallelism*. International Logic Programming Symposium, pages 135–151, MIT Press, October 1991.
30. K. Muthukumar, M.V. Hermenegildo. *Combined Determination of Sharing and Freeness of Program Variables Through Abstract Interpretation*. International Conference on Logic Programming (ICLP 1991), pages 49–63, MIT Press, June 1991.
31. S. K. Debray, N.-W. Lin, M.V. Hermenegildo. *Task Granularity Analysis in Logic Programs*. Proc. 1990 ACM Conf. on Programming Language Design and Implementation (PLDI), pages 174–188, ACM Press, June 1990.
32. K. Muthukumar, M.V. Hermenegildo. *The CDG, UDG, and MEL Methods for Automatic Compile-time Parallelization of Logic Programs for Independent And-parallelism*. Int'l. Conference on Logic Programming, pages 221–237, MIT Press, June 1990.
33. M.V. Hermenegildo, K. Greene. *\mathcal{E} -Prolog and its Performance: Exploiting Independent And-Parallelism*. 1990 International Conference on Logic Programming, pages 253–268, MIT Press, Association for Logic Programming, June 1990.

34. K. Muthukumar, M.V. Hermenegildo. *Determination of Variable Dependence Information at Compile-Time Through Abstract Interpretation*. 1989 North American Conference on Logic Programming, pages 166–189, MIT Press, October 1989.
35. M.V. Hermenegildo, F. Rossi. *On the Correctness and Efficiency of Independent And-Parallelism in Logic Programs*. 1989 North American Conference on Logic Programming, pages 369–390, MIT Press, October 1989.
36. K. Muthukumar, M.V. Hermenegildo. *Complete and Efficient Methods for Supporting Side Effects in Independent/Restricted And-parallelism*. 1989 International Conference on Logic Programming, pages 80–101, MIT Press, June 1989.
37. R. Warren, M.V. Hermenegildo, S. K. Debray. *On the Practicality of Global Flow Analysis of Logic Programs*. Fifth International Conference and Symposium on Logic Programming, pages 684–699, MIT Press, August 1988.

Books and Monographs:

1. M. Teresa Trigo de la Vega. *Fuzzy Granularity Control in Parallel/Distributed Computing*. Ms. Thesis, Technical University of Madrid, School of Computer Science, E-28660, Boadilla del Monte, Madrid, Spain, 66 pages, September 2010.
2. A. Casas. *Automatic Unrestricted Independent And-Parallelism in Declarative Multiparadigm Languages*. Ph.D. Thesis, University of New Mexico (UNM), Electrical and Computer Engineering Department, University of New Mexico, Albuquerque, NM 87131-0001 (USA), September 2008.
3. D. Cabeza. *An Extensible, Global Analysis Friendly Logic Programming System*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informatica UPM, 28660-Boadilla del Monte, Madrid-Spain, August 2004.
4. Alberto Díez Zurdo. *Goal Reordering in Logic Programs with Unrestricted Parallelism and Explicit Dependencies*. Ms. Thesis, School of Computer Science, Technical University of Madrid, September 2002. In Spanish.
5. Alberto Díez Zurdo. *Paralelización Automática de Programas Lógicos en Tiempo de Compilación con Dependencias Explícitas*. Ms. Thesis, Universidad Politécnica de Madrid (UPM), Facultad de Informática, Madrid, 28660, September 2002. In Spanish.
6. P. Lopez-Garcia. *Non-failure Analysis and Granularity Control in Parallel Execution of Logic Programs*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informatica UPM, 28660-Boadilla del Monte, Madrid-Spain, June 2000.
7. G. Puebla. *Advanced Compilation Techniques based on Abstract Interpretation and Program Transformation*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informatica UPM, 28660-Boadilla del Monte, Madrid-Spain, November 1997.
8. F. Bueno Carrillo. *Automatic Optimisation and Parallelisation of Logic Programs through Program Transformation*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), October 1994.
9. M. García de la Banda. *Independence, Global Analysis, and Parallelism in Dynamically Scheduled Constraint Logic Programming*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informatica UPM, 28660-Boadilla del Monte, Madrid-Spain, September 1994.
10. D. Cabeza Gras. *Parallelization of Prolog Programs Using the Notion of Non-Strict Independence*. Ms. Thesis, T. University of Madrid (UPM), Facultad de Informática, Madrid, 28660, December 1993.

11. P. Lopez-Garcia. *A System of Granularity Control in Parallel Logic Programs*. Ms. Thesis, T. University of Madrid (UPM), Facultad de Informática, Madrid, 28660, December 1993.

Invited Papers and Tutorials:

1. M.V. Hermenegildo. *50-Years of Prolog and Beyond (invited talk)*. November 2022. Keynote given at the Prolog 50th Anniversary ‘Prolog Day Symposium’.
2. M.V. Hermenegildo. *Some reflections on Prolog’s evolution, status, and future on the 50th anniversary of the birth of Prolog (abstract of invited talk)*. 38th International Conference on Logic Programming (ICLP’22 at FLoC’22), August 2022.
3. M.V. Hermenegildo, M. Carro, P. Lopez-Garcia, J.F. Morales, J. Arias, I. Garcia-Contreras, M. Klemen, N. Stulova. *25 Years of Ciao (abstract of invited tutorial)*. Pre-proceedings of the 28th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR’18), September 2018. Talk slides at https://cliplab.org/papers/ciao_tut_lopstr18.pdf.
4. M.V. Hermenegildo, F. Bueno, A. Casas, J. Navas, E. Mera, M. Carro, P. Lopez-Garcia. *Automatic Granularity-Aware Parallelization of Programs with Predicates, Functions, and Constraints*. DAMP’07, ACM SIGPLAN Workshop on Declarative Aspects of Multicore Programming, pages 1–1, ACM, January 2007. (abstract of invited talk).
5. M.V. Hermenegildo, G. Puebla, F. Bueno, P. Lopez-Garcia. *Program Development Using Abstract Interpretation (and The Ciao System Preprocessor)*. 10th International Static Analysis Symposium (SAS’03), LNCS, Num. 2694, pages 127–152, Springer-Verlag, June 2003.
6. M.V. Hermenegildo. *Parallelizing Irregular and Pointer-Based Computations Automatically: Results in Logic and Constraint Programming*. Constructive Methods for Parallel Programming, Advances in Computation: Theory and Practice, 1 pages, Nova Science, 2002. (abstract of invited talk).
7. M.V. Hermenegildo. *Automatic Parallelization of Irregular and Pointer-Based Computations: Perspectives from Logic and Constraint Programming*. Proceedings of EUROPAR’97, LNCS, Vol. 1300, pages 31–46, Springer-Verlag, August 1997.
8. M.V. Hermenegildo, G. Puebla. *Applying Multiple Abstract Specialization to Program Parallelization (abstract)*. Partial Evaluation– Dagstuhl Seminar Report, Num. 134, 1 pages, IBFI – Dagstuhl, February 1996.
9. M. García de la Banda, M.V. Hermenegildo. *A Practical Application of Sharing and Freeness Inference*. 1992 Workshop on Static Analysis WSA’92, BIGRE, Num. 81–82, pages 118–125, IRISA-Beaulieu, September 1992.

Articles in Books and Other Collections:

1. T. Trigo, P. Lopez-Garcia, S. Muñoz-Hernandez. *A Fuzzy Approach to Resource Aware Automatic Parallelization*. Computational Intelligence, Studies in Computational Intelligence (SCI), Vol. 399, pages 229–245, Springer Berlin Heidelberg, 2012.
2. M. Carro, M.V. Hermenegildo. *Logic Languages*. Encyclopedia of Parallel Computing, pages 1057–1068, Springer, 2011.
3. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, J.F. Morales, G. Puebla. *An Overview of The Ciao Multiparadigm Language and Program Development Environment and its Design Philosophy*. Festschrift for Ugo Montanari, LNCS, Vol. 5065, pages 209–237, Springer-Verlag, June 2008.

4. M.V. Hermenegildo. *Fundamentos y Aplicación Automática del Paralelismo en Inteligencia Artificial*. Inteligencia Artificial: Fundamentos Teóricos y Aplicaciones, pages 127–153, Real Academia de Ciencias Exactas, Físicas y Naturales, March 1992.

Publications in Refereed Workshops:

1. M. Klemen, P. Lopez-Garcia, J. Gallagher, J.F. Morales, M.V. Hermenegildo. *A General Framework for Static Cost Analysis of Parallel Logic Programs*. Pre-proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), November 2019.
2. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Incremental Analysis of Logic Programs with Assertions and Open Predicates*. Pre-proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), October 2019.
3. M. Klemen, P. Lopez-Garcia, J. Gallagher, J.F. Morales, M.V. Hermenegildo. *Towards a General Framework for Static Cost Analysis of Parallel Logic Programs*. Technical Communications of the 35th International Conference on Logic Programming (ICLP 2019), Electronic Proceedings in Theoretical Computer Science (EPTCS), pages 238–240, Open Publishing Association (OPA), September 2019. (Extended Abstract).
4. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *The Ciao Approach to the Dynamic vs. Static Language Dilemma*. Proceedings for the International Workshop on Scripts to Programs (STOP'11), 4 pages, ACM, 2011.
5. L. Scandolo, C. Kunz, G. Barthe, M.V. Hermenegildo. *Program Parallelization using Synchronized Pipelining*. Pre-proceedings of the 19th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'09), September 2009.
6. M. Méndez-Lojo, O. Lhoták, M.V. Hermenegildo. *Efficient Set Sharing using ZBDDs*. 21st Int'l. WS on Languages and Compilers for Parallel Computing (LCPC'08), LNCS, Vol. 5335, pages 94–108, Springer-Verlag, August 2008.
7. J. Navas, F. Bueno, M.V. Hermenegildo. *A study of set-sharing analysis via cliques*. The 15th Workshop on Logic-Based Methods in Programming Environments, WLPE'05, 15 pages, October 2005.
8. G. Puebla, M.V. Hermenegildo. *Abstract Specialization and its Application to Program Parallelization*. V International Workshop on Metaprogramming and Metareasoning in Logic, 1996.
9. M. García de la Banda, F. Bueno, M.V. Hermenegildo. *Towards Automatic Compile-Time Parallelization of CLP Programs by Analysis and Transformation*. Proceedings of the ILPS'95 Workshop on Parallel Logic Programming Systems, U. of Oregon, December 1995.
10. M.V. Hermenegildo, The CLIP Group. *Some Methodological Issues in the Design of CIAO - A Generic, Parallel Concurrent Constraint System*. Proc. of the 1994 ICOT/NSF Workshop on Parallel and Concurrent Programming, U. of Oregon, March 1994.
11. P. Lopez-Garcia, M.V. Hermenegildo. *Towards Dynamic Term Size Computation via Program Transformation*. Second Spanish Conference on Declarative Programming, pages 73–93, IIIA/CSIC, September 1993.
12. M.V. Hermenegildo, M. Carro. *Experimenting with Independent And-Parallel Prolog using Standard Prolog*. Jornadas Nacionales de Programación Declarativa, pages 478–497, U. Malaga, October 1991.

13. F. Bueno, M.V. Hermenegildo. *Towards an Automatic Translation Algorithm from Prolog to the Andorra Kernel Language*. Proc. of the 1991 GULP Conference on Logic Programming, pages 489–505, Italian Association for Logic Programming, June 1991.
14. M.V. Hermenegildo. *Compile-time Analysis Requirements for the Extended Andorra Model*. Parallel Logic Programming Workshop, SICS, June 1990.

Technical Reports and Manuals:

1. M. Klemen, P. Lopez-Garcia, J. Gallagher, J.F. Morales, M.V. Hermenegildo. *Towards a General Framework for Static Cost Analysis of Parallel Logic Programs*. Num. CLIP-1/2019.0, 19 pages, The CLIP Lab, IMDEA Software Institute and T.U. Madrid, July 2019.
2. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *An Overview of Ciao and its Design Philosophy*. Num. CLIP2/2010.0, Technical University of Madrid (UPM), March 2010. Under consideration for publication in *Theory and Practice of Logic Programming (TPLP)*.
3. M. Méndez-Lojo, O. Lhoták, M.V. Hermenegildo. *Fast Set Sharing using ZBDDs*. University of New Mexico, June 2008.
4. A. Casas, M. Carro, M.V. Hermenegildo. *Automatic Unrestricted Independent And-Parallelism in Logic Programs*. Num. CLIP11/2007.0, Technical University of Madrid (UPM), December 2007. Under consideration for publication in *Theory and Practice of Logic Programming (TPLP)*.
5. M. Méndez-Lojo, M.V. Hermenegildo. *Precise Set Sharing for Java-style Programs (and proofs)*. Num. CLIP2/2007.1, Technical University of Madrid (UPM), November 2007.
6. A. Casas, M. Carro, M.V. Hermenegildo. *Towards a High-Level Implementation of Execution Primitives for Non-restricted, Independent And-parallelism*. Num. TR-CS-2007-16, University of New Mexico (UNM), October 2007.
7. A. Casas, M. Carro, M.V. Hermenegildo. *Annotation Algorithms for Unrestricted Independent And-Parallelism in Logic Programs*. Num. TR-CS-2007-14, University of New Mexico (UNM), September 2007.
8. A. Casas, M. Carro, M.V. Hermenegildo. *Annotation Algorithms for Unrestricted Independent And-Parallelism in Logic Programs*. Num. CLIP5/2007.0, Technical University of Madrid (UPM), June 2007.
9. M. Méndez-Lojo, M.V. Hermenegildo. *Precise Set Sharing and Nullity Analysis for Java-style Programs*. Num. CLIP2/2007.0, Technical University of Madrid (UPM), February 2007.
10. F. Bueno, J. Navas, M.V. Hermenegildo. *Sharing, Freeness, Linearity, Redundancy, Widening, and Cliques*. Num. CLIP5/2005.0, 21 pages, Technical University of Madrid (UPM), April 2005.
11. F. Bueno, S. K. Debray, M. García de la Banda, M.V. Hermenegildo. *QE-Andorra: A Quiche-Eating Implementation of the Basic Andorra Model*. Num. CLIP05/96.0, T.U. of Madrid (UPM), February 1996.
12. M. García de la Banda, F. Bueno, M.V. Hermenegildo. *Automatic Compile-Time Parallelization of CLP Programs by Analysis and Transformation to a Concurrent Constraint Language*. Facultad de Informática, UPM, June 1995. Also in ILPS'95 WS on Parallel Logic Programming Systems.

13. F. Bueno, S. K. Debray, M. García de la Banda, M.V. Hermenegildo. *Transformation-based Implementation and Optimization of Programs Exploiting the Basic Andorra Model*. Num. CLIP11/95.0, ACCLAIM Deliverable D3.3/4-A1, Facultad de Informática, UPM, May 1995.
14. M. García de la Banda, M.V. Hermenegildo, K. Marriott. *Independence and Search Space Preservation in Dynamically Scheduled Constraint Logic Languages*. Facultad de Informática, UPM, February 1995.
15. M. García de la Banda, M.V. Hermenegildo, K. Marriott. *Independence in Dynamically Scheduled Languages*. Num. CLIP12/94.0, T. University of Madrid (UPM), September 1994. Presented at the ICLP'93 Post Conference Workshop on Concurrent Constraint Logic Programming.
16. F. Bueno, S. K. Debray, M. García de la Banda, M.V. Hermenegildo. *QE-Andorra: A Quiche-Eating Implementation of the Basic Andorra Model*. Num. CLIP13/94.0, T.U. of Madrid (UPM), September 1994.
17. M. García de la Banda, M.V. Hermenegildo, K. Marriott. *Search Space Preservation in CLP Languages*. Num. CLIP11/94.0, T. University of Madrid (UPM), September 1994.
18. F. Bueno, D. Cabeza, M.V. Hermenegildo, S. Prestwich, G. Puebla. *Some Improvements to an Abstract Syntax for Analysis and Optimization of Full (Parallel) Prolog*. Num. CLIP 8/94.0, Computer Science Dept., Technical U. of Madrid (UPM), September 1994.
19. M.V. Hermenegildo, P. Lopez-Garcia. *A Technique for Dynamic Term Size Computation via Program Transformation*. Num. CLIP 8/93.1(94), School of Computer Science, Technical University of Madrid, March 1994.
20. F. Bueno, M. García de la Banda, M.V. Hermenegildo, U. Montanari, F. Rossi. *From Eventual to Atomic and Locally Atomic CC Programs: A Concurrent Semantics*. Num. CLIP1/94.0, T.U. of Madrid (UPM), January 1994.
21. F. Bueno, M. García de la Banda, M.V. Hermenegildo. *The MEL, UDG, and CDG Methods for Automatic Compile-time Parallelization of Logic Programs for Independent And-Parallelism: A Comparative Study*. Num. CLIP3/94.0, T.U. of Madrid (UPM), January 1994.
22. M. García de la Banda, M.V. Hermenegildo, K. Marriott. *Independence in Logic Programs with Dynamic Scheduling*. U. of Madrid (UPM), 1994.
23. F. Bueno, M. García de la Banda, M.V. Hermenegildo. *Effectiveness of Global Analysis in Strict Independence-Based Automatic Program Parallelization*. Num. CLIP7/93.0, T.U. of Madrid (UPM), October 1993.
24. D. Cabeza, M.V. Hermenegildo. *Towards Extracting Non-Strict Independent And-Parallelism Using Sharing and Freeness Information*. Num. CLIP5/92.1, U. of Madrid (UPM), August 1993.
25. F. Bueno, M. García de la Banda, M.V. Hermenegildo, F. Rossi, U. Montanari. *Towards True Concurrency Semantics Based Program Transformation between CLP and CC*. Num. CLIP2/93.1(94), T.U. of Madrid (UPM), July 1993.
26. F. Bueno, M. García de la Banda, D. Cabeza, M.V. Hermenegildo. *The \mathcal{E} -Prolog Compiler System — Automatic Parallelization Tools for LP*. Num. CLIP5/93.0, Computer Science Dept., Technical U. of Madrid (UPM), June 1993.
27. F. Bueno, M. Carro, D. Cabeza, F. Ballesteros, P. Lopez-Garcia, M. García de la Banda, M.V. Hermenegildo, L. Gómez, S. Prestwich, S.-W. Yan. *A Proposal for an Interchange Abstract Syntax for (Parallel) Prolog*. Num. CLIP3/93.0, 33 pages, Computer Science Dept., Technical U. of Madrid (UPM), June 1993.

28. P. Lopez-Garcia, M.V. Hermenegildo. *An Automatic Sequentializer Based on Program Transformation*. T.U. of Madrid (UPM), April 1993.
29. P. Lopez-Garcia, M.V. Hermenegildo. *Dynamic Term Size Computation in Logic Programs via Program Transformation*. Num. CLIP 8/93.0, T.U. of Madrid (UPM), April 1993. Presented at the 1993 COMPULOG Area Meeting on Parallelism and Implementation Technologies.
30. U. Montanari, F. Rossi, F. Bueno, M. García de la Banda, M.V. Hermenegildo. *Contextual Nets and Constraint Logic Programming: Towards a True Concurrent Semantics for CLP*. Num. CLIP 2/93.0, T.U. of Madrid (UPM), January 1993. Presented at the ICLP'93 Post Conference Workshop on Concurrent Constraint Logic Programming.
31. M. García de la Banda, M.V. Hermenegildo, K. Marriott. *Independence in Constraint Logic Programs*. Num. CLIP6/92.0, U. of Madrid (UPM), November 1992.
32. D. Cabeza, M.V. Hermenegildo. *Extracting Non-Strict Independent And-Parallelism Using Sharing and Freeness Information*. Num. CLIP5/92.0, U. of Madrid (UPM), August 1992.
33. M. García de la Banda, M.V. Hermenegildo. *Effectiveness of Combined Sharing and Freeness Analysis using Abstract Interpretation*. Num. CLIP1/92.0, U. of Madrid (UPM), January 1992.
34. M.V. Hermenegildo, M. Carro. *Experimenting with Independent And-Parallel Prolog using Standard Prolog*. 24 pages, U. of Madrid (UPM), October 1991. Presented at the 1991 Spanish Workshop on Declarative Programming, Malaga.
35. M. Olmedilla, F. Bueno, M.V. Hermenegildo. *Automatic Exploitation of Non-Determinate Independent And-Parallelism in the Basic Andorra Model*. Num. FIM106.1/AI/91, Facultad de Informatica, U. P. Madrid, Spain, October 1991.
36. F. Bueno, M.V. Hermenegildo. *Results on Automatic Translation from Prolog to the Andorra Kernel Language*. Num. CLIP2/91.0, T.U. of Madrid (UPM), September 1991. theory in technical report, "Towards an Automatic Translation Algorithm from Prolog to the Andorra Kernel Language".
37. F. Bueno, M.V. Hermenegildo. *An Automatic Translation Scheme from Prolog to the Andorra Kernel Language*. Num. CLIP1/91.0, T.U. of Madrid, June 1991. also(first version) in Proc. GULP91, results and benchmarks in "Results on Automatic Translation from Prolog to the Andorra Kernel Language".
38. K. Muthukumar, M.V. Hermenegildo. *Combined Determination of Sharing and Freeness of Program Variables Through Abstract Interpretation*. Num. STP-368-90, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, December 1990.
39. K. Shen, M.V. Hermenegildo. *A Simulation Study of Or- and Independent And-parallelism*. Num. FIM-60.1/AI/90, Facultad de Informatica, U. P. Madrid, 28660 Boadilla del Monte, Madrid, Spain, October 1990.
40. M.V. Hermenegildo, K. Greene. *\mathcal{E} -Prolog and its Performance: Exploiting Independent And-Parallelism*. Num. ACA-ST-536-89, MCC, Austin, TX 78759, November 1989.
41. M.V. Hermenegildo, K. Muthukumar, K. Greene, F. Rossi, R. I. Nasr. *An Overview of the PAL Project*. Num. ACT-ST-234-89, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, September 1989.
42. K. Muthukumar, M.V. Hermenegildo. *Determination of Variable Dependence Information at Compile-Time Through Abstract Interpretation*. Num. ACA-ST-232-89, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, March 1989.

43. K. Muthukumar, M.V. Hermenegildo. *Methods for Automatic Compile-time Parallelization of Logic Programs using Independent/Restricted And-parallelism*. Num. ACA-ST-233-89, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, March 1989.
44. K. Muthukumar, M.V. Hermenegildo. *Efficient Methods for Supporting Side Effects in Independent And-parallelism and Their Backtracking Semantics*. Num. ACA-ST-031-89, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, January 1989.
45. R. Warren, M.V. Hermenegildo, S.K. Debray. *MA3: A System for Automatic Generation of CGEs*. Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, February 1988.
46. Sanjay Deshpande, Matt Sejnowski, Manuel V. Hermenegildo, Julio de Melo, Roy Jenevein, Ashok Adiga, Allan Clarke. *TRAC (Texas Reconfigurable Array Computer) – Users’ Manual*. 1985.

7 Publications in Task Granularity Analysis and Control

Articles in Refereed Journals:

1. Agostino Dovier, Andrea Formisano, Gopal Gupta, Manuel V. Hermenegildo, Enrico Pontelli, Ricardo Rocha. *Parallel Logic Programming: A Sequel*. Theory and Practice of Logic Programming, 20th Anniversary Special Issue, Vol. 22, Num. 6, pages 905–973, Cambridge U. Press, March 2022.
2. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Some Trade-offs in Reducing the Overhead of Assertion Run-time Checks via Static Analysis*. Science of Computer Programming, Vol. 155, pages 3–26, Elsevier North-Holland, April 2018. Selected and Extended papers from the 2016 International Symposium on Principles and Practice of Declarative Programming.
3. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *An Overview of Ciao and its Design Philosophy*. Theory and Practice of Logic Programming, Vol. 12, Num. 1–2, pages 219–252, Cambridge University Press, January 2012.
4. M.V. Hermenegildo, G. Puebla, F. Bueno, P. Lopez-Garcia. *Integrated Program Debugging, Verification, and Optimization Using Abstract Interpretation (and The Ciao System Preprocessor)*. Science of Computer Programming, Vol. 58, Num. 1–2, pages 115–140, Elsevier North-Holland, October 2005.
5. G. Gupta, E. Pontelli, K. Ali, M. Carlsson, M.V. Hermenegildo. *Parallel Execution of Prolog Programs: a Survey*. ACM Transactions on Programming Languages and Systems, Vol. 23, Num. 4, pages 472–602, ACM Press, July 2001.
6. P. Lopez-Garcia, M.V. Hermenegildo, S. K. Debray. *A Methodology for Granularity Based Control of Parallelism in Logic Programs*. Journal of Symbolic Computation, Special Issue on Parallel Symbolic Computation, Vol. 21, Num. 4–6, pages 715–734, Academic Press, 1996.

Articles in Refereed Conferences:

1. M. Klemen, P. Lopez-Garcia, J. Gallagher, J.F. Morales, M.V. Hermenegildo. *A General Framework for Static Cost Analysis of Parallel Logic Programs*. Post-Proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), LNCS, Vol. 12042, pages 19–35, Springer-Verlag, April 2020.
2. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Incremental Analysis of Logic Programs with Assertions and Open Predicates*. Proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), LNCS, Vol. 12042, pages 36–56, Springer, 2020.
3. T. Trigo, P. Lopez-Garcia, S. Muñoz-Hernandez. *Towards Fuzzy Granularity Control in Parallel/Distributed Computing*. International Conference on Fuzzy Computation (ICFC 2010), pages 43–55, SciTePress, October 2010.
4. P. Lopez-Garcia, M.V. Hermenegildo. *Efficient Term Size Computation for Granularity Control*. International Conference on Logic Programming, pages 647–661, MIT Press, Cambridge, MA, June 1995.
5. P. Lopez-Garcia, M.V. Hermenegildo, S.K. Debray. *Towards Granularity Based Control of Parallelism in Logic Programs*. Proc. of First International Symposium on Parallel Symbolic Computation, PASCOS'94, pages 133–144, World Scientific, September 1994.

6. S. K. Debray, N.-W. Lin, M.V. Hermenegildo. *Task Granularity Analysis in Logic Programs*. Proc. 1990 ACM Conf. on Programming Language Design and Implementation (PLDI), pages 174–188, ACM Press, June 1990.

Books and Monographs:

1. M. Teresa Trigo de la Vega. *Fuzzy Granularity Control in Parallel/Distributed Computing*. Ms. Thesis, Technical University of Madrid, School of Computer Science, E-28660, Boadilla del Monte, Madrid, Spain, 66 pages, September 2010.
2. P. Lopez-Garcia. *Non-failure Analysis and Granularity Control in Parallel Execution of Logic Programs*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informatica UPM, 28660-Boadilla del Monte, Madrid-Spain, June 2000.
3. P. Lopez-Garcia. *A System of Granularity Control in Parallel Logic Programs*. Ms. Thesis, T. University of Madrid (UPM), Facultad de Informática, Madrid, 28660, December 1993.

Invited Papers and Tutorials:

1. M.V. Hermenegildo. *50-Years of Prolog and Beyond (invited talk)*. November 2022. Keynote given at the Prolog 50th Anniversary ‘Prolog Day Symposium’.
2. M.V. Hermenegildo. *Some reflections on Prolog’s evolution, status, and future on the 50th anniversary of the birth of Prolog (abstract of invited talk)*. 38th International Conference on Logic Programming (ICLP’22 at FLoC’22), August 2022.
3. M.V. Hermenegildo, M. Carro, P. Lopez-Garcia, J.F. Morales, J. Arias, I. Garcia-Contreras, M. Klemen, N. Stulova. *25 Years of Ciao (abstract of invited tutorial)*. Pre-proceedings of the 28th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR’18), September 2018. Talk slides at https://cliplab.org/papers/ciao_tut_lopstr18.pdf.
4. M.V. Hermenegildo, F. Bueno, A. Casas, J. Navas, E. Mera, M. Carro, P. Lopez-Garcia. *Automatic Granularity-Aware Parallelization of Programs with Predicates, Functions, and Constraints*. DAMP’07, ACM SIGPLAN Workshop on Declarative Aspects of Multicore Programming, pages 1–1, ACM, January 2007. (abstract of invited talk).
5. M.V. Hermenegildo, G. Puebla, F. Bueno, P. Lopez-Garcia. *Program Development Using Abstract Interpretation (and The Ciao System Preprocessor)*. 10th International Static Analysis Symposium (SAS’03), LNCS, Num. 2694, pages 127–152, Springer-Verlag, June 2003.
6. M.V. Hermenegildo. *Automatic Parallelization of Irregular and Pointer-Based Computations: Perspectives from Logic and Constraint Programming*. Proceedings of EUROPAR’97, LNCS, Vol. 1300, pages 31–46, Springer-Verlag, August 1997.

Articles in Books and Other Collections:

1. T. Trigo, P. Lopez-Garcia, S. Muñoz-Hernandez. *A Fuzzy Approach to Resource Aware Automatic Parallelization*. Computational Intelligence, Studies in Computational Intelligence (SCI), Vol. 399, pages 229–245, Springer Berlin Heidelberg, 2012.
2. M. Carro, M.V. Hermenegildo. *Logic Languages*. Encyclopedia of Parallel Computing, pages 1057–1068, Springer, 2011.

3. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, J.F. Morales, G. Puebla. *An Overview of The Ciao Multiparadigm Language and Program Development Environment and its Design Philosophy*. Festschrift for Ugo Montanari, LNCS, Vol. 5065, pages 209–237, Springer-Verlag, June 2008.

Publications in Refereed Workshops:

1. M. Klemen, P. Lopez-Garcia, J. Gallagher, J.F. Morales, M.V. Hermenegildo. *A General Framework for Static Cost Analysis of Parallel Logic Programs*. Pre-proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), November 2019.
2. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Incremental Analysis of Logic Programs with Assertions and Open Predicates*. Pre-proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), October 2019.
3. M. Klemen, P. Lopez-Garcia, J. Gallagher, J.F. Morales, M.V. Hermenegildo. *Towards a General Framework for Static Cost Analysis of Parallel Logic Programs*. Technical Communications of the 35th International Conference on Logic Programming (ICLP 2019), Electronic Proceedings in Theoretical Computer Science (EPTCS), pages 238–240, Open Publishing Association (OPA), September 2019. (Extended Abstract).
4. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *The Ciao Approach to the Dynamic vs. Static Language Dilemma*. Proceedings for the International Workshop on Scripts to Programs (STOP'11), 4 pages, ACM, 2011.
5. M.V. Hermenegildo, The CLIP Group. *Some Methodological Issues in the Design of CIAO - A Generic, Parallel Concurrent Constraint System*. Proc. of the 1994 ICOT/NSF Workshop on Parallel and Concurrent Programming, U. of Oregon, March 1994.
6. P. Lopez-Garcia, M.V. Hermenegildo. *Towards Dynamic Term Size Computation via Program Transformation*. Second Spanish Conference on Declarative Programming, pages 73–93, IIIA/CSIC, September 1993.

Technical Reports and Manuals:

1. M. Klemen, P. Lopez-Garcia, J. Gallagher, J.F. Morales, M.V. Hermenegildo. *Towards a General Framework for Static Cost Analysis of Parallel Logic Programs*. Num. CLIP-1/2019.0, 19 pages, The CLIP Lab, IMDEA Software Institute and T.U. Madrid, July 2019.
2. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *An Overview of Ciao and its Design Philosophy*. Num. CLIP2/2010.0, Technical University of Madrid (UPM), March 2010. Under consideration for publication in *Theory and Practice of Logic Programming (TPLP)*.
3. M.V. Hermenegildo, P. Lopez-Garcia. *A Technique for Dynamic Term Size Computation via Program Transformation*. Num. CLIP 8/93.1(94), School of Computer Science, Technical University of Madrid, March 1994.
4. P. Lopez-Garcia, M.V. Hermenegildo. *An Automatic Sequentializer Based on Program Transformation*. T.U. of Madrid (UPM), April 1993.
5. P. Lopez-Garcia, M.V. Hermenegildo. *Dynamic Term Size Computation in Logic Programs via Program Transformation*. Num. CLIP 8/93.0, T.U. of Madrid (UPM), April 1993. Presented at the 1993 COMPULOG Area Meeting on Parallelism and Implementation Technologies.

8 Publications in Parallel Execution Models and Task Scheduling

Articles in Refereed Journals:

1. Agostino Dovier, Andrea Formisano, Gopal Gupta, Manuel V. Hermenegildo, Enrico Pontelli, Ricardo Rocha. *Parallel Logic Programming: A Sequel*. Theory and Practice of Logic Programming, 20th Anniversary Special Issue, Vol. 22, Num. 6, pages 905–973, Cambridge U. Press, March 2022.
2. Zorana Banković, Umer Liqat, Pedro Lopez-Garcia. *A General Methodology for Energy-efficient Scheduling in Multicore Environments based on Evolutionary Algorithms*. Journal of Multiple-Valued Logic and Soft Computing (JMVLS), SOCO'15 Special Issue, Vol. 32, Num. 3-4, pages 313–341, Old City Publishing, 2019.
3. Zorana Banković, Pedro Lopez-Garcia. *Stochastic vs. Deterministic Evolutionary Algorithm-based Allocation and Scheduling for XMOs Chips*. Neurocomputing, Vol. 150, pages 82–89, Elsevier, February 2015.
4. P. Chico de Guzmán, A. Casas, M. Carro, M.V. Hermenegildo. *Parallel Backtracking with Answer Memoing for Independent And-Parallelism*. Theory and Practice of Logic Programming, 27th Int'l. Conference on Logic Programming (ICLP'11) Special Issue, Vol. 11, Num. 4–5, pages 555–574, Cambridge U. Press, July 2011.
5. G. Gupta, E. Pontelli, K. Ali, M. Carlsson, M.V. Hermenegildo. *Parallel Execution of Prolog Programs: a Survey*. ACM Transactions on Programming Languages and Systems, Vol. 23, Num. 4, pages 472–602, ACM Press, July 2001.
6. M.V. Hermenegildo, M. Carro. *Relating Data-Parallelism and (And-) Parallelism in Logic Programs*. The Computer Languages Journal, Vol. 22, Num. 2/3, pages 143–163, Elsevier Science, July 1996.
7. E. Pontelli, G. Gupta, D. Tang, M. Carro, M.V. Hermenegildo. *Improving the Efficiency of Nondeterministic And-parallel Systems*. The Computer Languages Journal, Vol. 22, Num. 2/3, pages 115–142, Pergamon/Elsevier, July 1996.
8. K. Shen, M.V. Hermenegildo. *High-level Characteristics of Or- and Independent And-parallelism in Prolog*. Int'l. Journal of Parallel Programming, Vol. 24, Num. 5, pages 433–478, Plenum Press, 1996.
9. M.V. Hermenegildo, F. Rossi. *Strict and Non-Strict Independent And-Parallelism in Logic Programs: Correctness, Efficiency, and Compile-Time Conditions*. Journal of Logic Programming, Vol. 22, Num. 1, pages 1–45, Elsevier - North Holland, 1995.
10. G. Gupta, M.V. Hermenegildo, V. Santos-Costa. *And-Or Parallel Prolog: A Recomputation Based Approach*. New Generation Computing, Vol. 11, Num. 3–4, pages 297–323, Springer Verlag, 1993.
11. M.V. Hermenegildo, K. Greene. *The \mathcal{E} -Prolog System: Exploiting Independent And-Parallelism*. New Generation Computing, Vol. 9, Num. 3,4, pages 233–257, Springer Verlag, 1991.
12. M.V. Hermenegildo, E. Tick. *Memory Referencing Characteristics and Caching Performance of AND-Parallel Prolog on Shared-Memory Architectures*. New Generation Computing, Vol. 7, Num. 1, pages 37–58, Springer Verlag, October 1989.
13. M.V. Hermenegildo, R. Warren. *Designing a High-Performance Parallel Logic Programming System*. Computer Architecture News, Special Issue on Parallel Symbolic Programming, Vol. 15, Num. 1, pages 43–53, ACM, March 1987.

Articles in Refereed Conferences:

1. P. Chico de Guzmán, A. Casas, M. Carro, M.V. Hermenegildo. *A Segment-Swapping Approach for Executing Trapped Computations*. PADL'12, LNCS, Vol. 7149, pages 138–152, Springer Verlag, January 2012.
2. L. Scandolo, C. Kunz, G. Barthe, M.V. Hermenegildo. *Program Parallelization using Synchronized Pipelining*. Proceedings of the 19th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'09), LNCS, Vol. 6037, pages 173–187, Springer, 2010.
3. A. Casas, M. Carro, M.V. Hermenegildo. *A High-Level Implementation of Non-Deterministic, Unrestricted, Independent And-Parallelism*. 24th International Conference on Logic Programming (ICLP'08), LNCS, Vol. 5366, pages 651–666, Springer-Verlag, December 2008.
4. A. Casas, M. Carro, M.V. Hermenegildo. *Towards a High-Level Implementation of Execution Primitives for Unrestricted, Independent And-parallelism*. 10th International Symposium on Practical Aspects of Declarative Languages (PADL'08), LNCS, Vol. 4902, pages 230–247, Springer-Verlag, January 2008.
5. A. Casas, M. Carro, M.V. Hermenegildo. *Annotation Algorithms for Unrestricted Independent And-Parallelism in Logic Programs*. 17th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'07), LNCS, Num. 4915, pages 138–153, Springer-Verlag, August 2007.
6. M. Carro, M.V. Hermenegildo. *Concurrency in Prolog Using Threads and a Shared Database*. 1999 International Conference on Logic Programming, pages 320–334, MIT Press, Cambridge, MA, USA, November 1999.
7. M. García de la Banda, F. Bueno, M.V. Hermenegildo. *Towards Independent And-Parallelism in CLP*. Programming Languages: Implementation, Logics, and Programs, LNCS, Num. 1140, pages 77–91, Springer-Verlag, September 1996.
8. M. García de la Banda, M.V. Hermenegildo, K. Marriott. *Independence in Dynamically Scheduled Logic Languages*. 1996 International Conference on Algebraic and Logic Programming, LNCS, Num. 1139, pages 47–61, Springer-Verlag, September 1996.
9. K. Shen, M.V. Hermenegildo. *Flexible Scheduling for Non-Deterministic, And-parallel Execution of Logic Programs*. Proceedings of EuroPar'96, LNCS, Num. 1124, pages 635–640, Springer-Verlag, August 1996.
10. M.V. Hermenegildo, M. Carro. *Relating Data-Parallelism and And-Parallelism in Logic Programs*. Proceedings of EURO-PAR'95, LNCS, Num. 966, pages 27–42, Springer-Verlag, August 1995.
11. M.V. Hermenegildo, D. Cabeza, M. Carro. *Using Attributed Variables in the Implementation of Concurrent and Parallel Logic Programming Systems*. Proc. of the Twelfth International Conference on Logic Programming, pages 631–645, MIT Press, June 1995.
12. E. Pontelli, G. Gupta, M.V. Hermenegildo. *εACE: A High-Performance Parallel Prolog System*. International Parallel Processing Symposium, pages 564–572, IEEE Computer Society, IEEE Computer Society Technical Committee on Parallel Processing, April 1995.
13. G. Gupta, M.V. Hermenegildo, E. Pontelli, V. Santos-Costa. *ACE: And/Or-parallel Copying-based Execution of Logic Programs*. International Conference on Logic Programming, pages 93–110, MIT Press, June 1994.

14. M. Olmedilla, F. Bueno, M.V. Hermenegildo. *Automatic Exploitation of Non-Determinate Independent And-Parallelism in the Basic Andorra Model*. Logic Program Synthesis and Transformation, 1993, Workshops in Computing, pages 177–195, Springer-Verlag, July 1993.
15. H. Kuchen, J. Moreno-Navarro, M.V. Hermenegildo. *Independent AND-Parallel Implementation of Narrowing*. Proc. 4th Int'l. Symposium on Programming Language Implementation and Logic Programming, LNCS, Num. 631, pages 24–38, Springer-Verlag, August 1992.
16. G. Gupta, M.V. Hermenegildo. *Recomputation based Implementation of And-Or Parallel Prolog*. Proc. of the 1992 International Conference on Fifth Generation Computer Systems, pages 770–782, Institute for New Generation Computer Technology (ICOT), June 1992.
17. F. Bueno, M.V. Hermenegildo. *An Automatic Translation Scheme from Prolog to the Andorra Kernel Language*. Proc. of the 1992 International Conference on Fifth Generation Computer Systems, Vol. 2, pages 759–769, Institute for New Generation Computer Technology (ICOT), June 1992.
18. K. Shen, M.V. Hermenegildo. *A Simulation Study of Or- and Independent And-parallelism*. International Logic Programming Symposium, pages 135–151, MIT Press, October 1991.
19. G. Gupta, V. Santos-Costa, R. Yang, M.V. Hermenegildo. *IDIOM: Integrating Dependent And-, Independent And-, and Or-parallelism*. 1991 International Logic Programming Symposium, pages 152–166, MIT Press, October 1991.
20. M.V. Hermenegildo, F. Rossi. *Non-Strict Independent And-Parallelism*. 1990 International Conference on Logic Programming, pages 237–252, MIT Press, Association for Logic Programming, June 1990.
21. M.V. Hermenegildo, K. Greene. *\mathcal{E} -Prolog and its Performance: Exploiting Independent And-Parallelism*. 1990 International Conference on Logic Programming, pages 253–268, MIT Press, Association for Logic Programming, June 1990.
22. M.V. Hermenegildo, F. Rossi. *On the Correctness and Efficiency of Independent And-Parallelism in Logic Programs*. 1989 North American Conference on Logic Programming, pages 369–390, MIT Press, October 1989.
23. K. Muthukumar, M.V. Hermenegildo. *Complete and Efficient Methods for Supporting Side Effects in Independent/Restricted And-parallelism*. 1989 International Conference on Logic Programming, pages 80–101, MIT Press, June 1989.
24. M.V. Hermenegildo, E. Tick. *Memory Performance of AND-Parallel Prolog on Shared-Memory Architectures*. Proceedings of the 17th International Conference on Parallel Processing, pages 17–22, IEEE, August 1988.
25. A. Guzmán, M.V. Hermenegildo. *Constructs and Evaluation Strategies for Intelligent Speculative Parallelism – Armageddon Revisited*. 1988 ACM Computer Science Conference, pages 106–115, ACM, February 1988.
26. M.V. Hermenegildo. *Relating Goal Scheduling, Precedence, and Memory Management in AND-Parallel Execution of Logic Programs*. Fourth International Conference on Logic Programming, pages 556–575, MIT Press, University of Melbourne, May 1987.
27. M.V. Hermenegildo, R. I. Nasr. *Efficient Management of Backtracking in AND-parallelism*. Third International Conference on Logic Programming, LNCS, Num. 225, pages 40–55, Springer-Verlag, Imperial College, July 1986.

28. M.V. Hermenegildo. *An Abstract Machine for Restricted AND-parallel Execution of Logic Programs*. Third International Conference on Logic Programming, Lecture Notes in Computer Science, Num. 225, pages 25–40, Springer-Verlag, Imperial College, July 1986.
29. G. J. Lipovski, M.V. Hermenegildo. *B-LOG: A Branch and Bound Methodology for the Parallel Execution of Logic Programs*. 1985 IEEE International Conference on Parallel Processing, pages 560–568, IEEE Computer Society, August 1985.

Books and Monographs:

1. A. Casas. *Automatic Unrestricted Independent And-Parallelism in Declarative Multiparadigm Languages*. Ph.D. Thesis, University of New Mexico (UNM), Electrical and Computer Engineering Department, University of New Mexico, Albuquerque, NM 87131-0001 (USA), September 2008.
2. M. Carro. *Some Contributions to the Study of Parallelism and Concurrency in Logic Programming*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informatica UPM, 28660-Boadilla del Monte, Madrid-Spain, November 2001.
3. M. García de la Banda. *Independence, Global Analysis, and Parallelism in Dynamically Scheduled Constraint Logic Programming*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informatica UPM, 28660-Boadilla del Monte, Madrid-Spain, September 1994.
4. M. Carro. *Implementation of Non-Determinism and Optimization of the Memory Usage in the And-Parallel Execution of Logic Programs*. Ms. Thesis, T. University of Madrid (UPM), Facultad de Informática, Madrid, 28660, 99 pages, December 1993. In Spanish.
5. M.V. Hermenegildo. *An Abstract Machine Based Execution Model for Computer Architecture Design and Efficient Implementation of Logic Programs in Parallel*. Ph.D. Thesis, Dept. of Electrical and Computer Engineering (Dept. of Computer Science TR-86-20), University of Texas at Austin, Austin, Texas 78712, 244 pages, UMI, Boston, MA and U. of Texas, August 1986.
6. M.V. Hermenegildo. *Computational Models for Sequential and Parallel Execution of Logic Programs on a Reconfigurable Architecture*. Ms. Thesis, The University of Texas at Austin, ENS Bldg. 515, Austin, TX 78712, 122 pages, June 1984.

Articles in Books and Other Collections:

1. K. Shen, M.V. Hermenegildo. *Divided We Stand: Parallel Distributed Stack Memory Management*. Implementations of Logic Programming Systems, pages 185–203, Kluwer Academic Publishers, 1994.
2. M.V. Hermenegildo. *Research on Parallel Logic Language Implementation and Architecture at ICOT*. The ICOT Research Exchange Report, Vol. 2, pages 157–174, Institute for New Generation Computer Technology (ICOT), June 1992.

Publications in Refereed Workshops:

1. L. Scandolo, C. Kunz, G. Barthe, M.V. Hermenegildo. *Program Parallelization using Synchronized Pipelining*. Pre-proceedings of the 19th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'09), September 2009.

2. A. Casas, M. Carro, M.V. Hermenegildo. *Towards High-Level Execution Primitives for And-Parallelism: Preliminary Results*. Colloquium on Implementation of Constraint and Logic Programming Systems (CICLOPS'07, ICLP associated workshop), 15 pages, U. of Evora, September 2007.
3. A. Casas, M. Carro, M.V. Hermenegildo. *Towards A High-Level Implementation of Flexible Parallelism Primitives for Symbolic Languages*. Parallel Symbolic Computation (PASCO'07), 2 pages, ACM Press, July 2007. Extended Abstract.
4. M.V. Hermenegildo, D. Cabeza, M. Carro. *On The Uses of Attributed Variables in Parallel and Concurrent Logic Programming Systems*. Proc. of the 1994 COMPULOG-NET Workshop Parallelism and Implementation Technologies, 15 pages, U. of Madrid, September 1994. Also provided as attachment UPM-1 of deliverable D4.3/2.
5. M.V. Hermenegildo, M. Carro. *A Note on Data-Parallelism and (And-Parallel) Prolog*. ICLP WS on Parallel and Data Parallel Execution of Logic Programs, 16 pages, June 1994.
6. D. Tang, E. Pontelli, G. Gupta, M. Carro. *Last Parallel Call Optimization and Fast Backtracking in And-parallel Logic Programming Systems*. ICLP WS on Parallel and Data Parallel Execution of Logic Programs, 14 pages, Uppsala University, CS Department, Box 311, S-751 Uppsala, Sweden, June 1994.
7. M.V. Hermenegildo, The CLIP Group. *Some Methodological Issues in the Design of CIAO - A Generic, Parallel Concurrent Constraint System*. Proc. of the 1994 ICOT/NSF Workshop on Parallel and Concurrent Programming, U. of Oregon, March 1994.
8. M. Carro, L. Gómez, M.V. Hermenegildo. *Implementation of an Event Driven Scheme for Visualizing Parallel Execution of Logic Programs*. JICSLP'92 Workshop on Parallel Execution, 15 pages, November 1992.
9. M. Carro, L. Gómez, M.V. Hermenegildo. *Implementation of an Event Driven Scheme for Visualizing Parallel Execution of Logic Programs*. Primer Congreso Nacional de Programación Declarativa, pages 262–278, FIM/UPM, September 1992.
10. G. Gupta, M.V. Hermenegildo, V. Santos-Costa. *Generalized Stack Copying for And-Or Parallel Implementations*. JICSLP'92 Workshop on Parallel Execution, 15 pages, 1992.
11. G. Gupta, M.V. Hermenegildo. *ACE: And/Or-parallel Copying-based Execution of Logic Programs*. ICLP '91 Workshop on Parallel Execution of Logic Programs, LNCS, Num. 569, pages 146–159, Springer-Verlag, December 1991.
12. I. Walker, M.V. Hermenegildo. *An application of AI techniques and parallel implementation technology to the trajectory planning problem for redundant robot manipulators*. 1987 IEEE International Workshop on Robotics: Trends, Technology, and Applications, pages 53–61, ETSIInf, IEEE, February 1988.

Technical Reports and Manuals:

1. Guillermo Viguera, Salvador Tamarit, Manuel Carro, Julio Mariño. *Towards a Rule-Based Approach to Generate High-Performance Scientific Code*. Num. CLIP1/2015.0, 8 pages, The CLIP Lab, March 2015. <https://cliplab.org/papers/viguera15-rule-based.pdf>.
2. P. Chico de Guzmán, A. Casas, M. Carro, M.V. Hermenegildo. *A Simulation Study on Parallel Backtracking with Solution Memoing for Independent And-Parallelism*. Num. CLIP1/2011.0, 12 pages, Technical University of Madrid (UPM), January 2011.
3. A. Casas, M. Carro, M.V. Hermenegildo. *A High-Level Implementation of Non-Deterministic, Unrestricted, Independent And-Parallelism*. Num. TR-CS-2008-10, University of New Mexico (UNM), September 2008.

4. A. Casas, M. Carro, M.V. Hermenegildo. *Automatic Unrestricted Independent And-Parallelism in Logic Programs*. Num. CLIP11/2007.0, Technical University of Madrid (UPM), December 2007. Under consideration for publication in *Theory and Practice of Logic Programming (TPLP)*.
5. A. Casas, M. Carro, M.V. Hermenegildo. *Towards a High-Level Implementation of Execution Primitives for Non-restricted, Independent And-parallelism*. Num. TR-CS-2007-16, University of New Mexico (UNM), October 2007.
6. A. Casas, M. Carro, M.V. Hermenegildo. *Annotation Algorithms for Unrestricted Independent And-Parallelism in Logic Programs*. Num. TR-CS-2007-14, University of New Mexico (UNM), September 2007.
7. A. Casas, M. Carro, M.V. Hermenegildo. *Towards a High-Level Implementation of Execution Primitives for Non-Restricted, Independent And-Parallelism*. Num. CLIP7/2007.0, Technical University of Madrid (UPM), August 2007.
8. A. Casas, M. Carro, M.V. Hermenegildo. *Annotation Algorithms for Unrestricted Independent And-Parallelism in Logic Programs*. Num. CLIP5/2007.0, Technical University of Madrid (UPM), June 2007.
9. A. Kostenko, M. Carro. *A Preliminary DHT Infrastructure for Ciao*. Num. CLIP12/2006.0, Technical University of Madrid (UPM), August 2006.
10. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla (Eds.). *The Ciao System. Reference Manual (V1.10)*. School of Computer Science, Technical University of Madrid (UPM), June 2004. System and on-line version of the manual available at <https://ciao-lang.org>.
11. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.8)*. Num. CLIP4/2002.1, School of Computer Science, Technical University of Madrid (UPM), May 2002. System and on-line version of the manual available at <https://ciao-lang.org>.
12. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.6)*. Num. CLIP5/2000.1, School of Computer Science, Technical University of Madrid (UPM), July 2000. System and on-line version of the manual available at <https://ciao-lang.org>.
13. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.0)*. Num. CLIP11/99.1, School of Computer Science, Technical University of Madrid (UPM), June 1999. System and on-line version of the manual available at <https://ciao-lang.org>.
14. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V0.6)*. Num. CLIP12/98.1, School of Computer Science, Technical University of Madrid (UPM), July 1998. System and on-line version of the manual available at <https://ciao-lang.org>.
15. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual*. Num. CLIP3/97.1, School of Computer Science, Technical University of Madrid (UPM), August 1997. System and on-line version of the manual available at <https://ciao-lang.org>.
16. M.V. Hermenegildo, M. Carro. *A Note on Data-Parallelism and (And-Parallel) Prolog*. Num. CLIP 6/94.0, 15 pages, School of Computer Science, Technical University of Madrid (UPM), June 1995.

17. E. Pontelli, G. Gupta, D. Tang, M.V. Hermenegildo, M. Carro. *Efficient Implementation of And-parallel Prolog Systems*. Num. CLIP4/95.0, T.U. of Madrid (UPM), June 1995.
18. M.V. Hermenegildo, D. Cabeza, M. Carro. *On The Uses of Attributed Variables in Parallel and Concurrent Logic Programming Systems*. Num. CLIP 5/94.0, 17 pages, School of Computer Science, Technical University of Madrid (UPM), June 1994. Presented at the ILPS'94 Post Conference Workshop on Design and Implementation of Parallel Logic Programming Systems, Available from <https://www.cliplab.org/>.
19. K. Shen, M.V. Hermenegildo. *A Flexible Scheduling and Memory Management Scheme for Non-Deterministic, And-parallel Execution*. Num. CLIP6/94.0, T.U. of Madrid (UPM), June 1994.
20. K. Shen, M.V. Hermenegildo. *A Flexible Scheduling and Memory Management Scheme for Non-Deterministic, And-parallel Execution of Logic Programs*. Num. CLIP 4/93.0, T.U. of Madrid (UPM), April 1993. Presented at the ICLP'93 Post Conference Workshop on Logic Program Implementation.
21. M. Carro, L. Gómez, M.V. Hermenegildo. *Using VisAndOr to Debug and Understand Parallel Execution of Logic Programs*. Num. CLIP 1/93.0, School of Computer Science, Technical University of Madrid, February 1993.
22. G. Gupta, M.V. Hermenegildo, E. Pontelli, V. Santos-Costa. *ACE: And/Or-parallel Copying-based Execution of Logic Programs*. New Mexico State University, Computer Science Dept., 1993.
23. G. Gupta, M.V. Hermenegildo, E. Pontelli, V. Santos-Costa. *ACE: And/Or-parallel Copying-based Execution of Logic Programs*. Num. CLIP7/92.0, U. of Madrid (UPM) and New Mexico S.U., November 1992.
24. F. Bueno, M.V. Hermenegildo. *Results on Automatic Translation from Prolog to the Andorra Kernel Language*. Num. CLIP2/91.0, T.U. of Madrid (UPM), September 1991. theory in technical report, "Towards an Automatic Translation Algorithm from Prolog to the Andorra Kernel Language".
25. G. Gupta, M.V. Hermenegildo. *ACE: And/Or-parallel Copying-based Execution of Logic Programs*. Num. without, T.U. of Madrid (UPM), June 1991. also in Proc. ICLP91 Workshop on Parallel Execution of Logic Programs.
26. G. Gupta, V. Santos-Costa, R. Yang, M.V. Hermenegildo. *IDIOM: A Model Intergrating Dependent-, Independent-, and Or-parallelism*. Num. CLIP8/91.0, University of Bristol, March 1991.
27. K. Shen, M.V. Hermenegildo. *A Simulation Study of Or- and Independent And-parallelism*. Num. FIM-60.1/AI/90, Facultad de Informatica, U. P. Madrid, 28660 Boadilla del Monte, Madrid, Spain, October 1990.
28. M.V. Hermenegildo, R. I. Nasr. *A Tool for Visualizing Independent And-parallelism in Logic Programs*. Num. CLIP1/90.0, T.U. of Madrid (UPM), 1990. Presented at the NACL90 Workshop on Parallel Logic Programming, Austin, TX.
29. M.V. Hermenegildo, K. Greene. *℘-Prolog and its Performance: Exploiting Independent And-Parallelism*. Num. ACA-ST-536-89, MCC, Austin, TX 78759, November 1989.
30. M.V. Hermenegildo, F. Rossi. *Strict and Non-Strict Independent And-Parallelism in Logic Programs: Correctness, Efficiency, and Compile-Time Conditions*. Num. ACA-ST-537-89, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, November 1989.

31. M.V. Hermenegildo, K. Muthukumar, K. Greene, F. Rossi, R. I. Nasr. *An Overview of the PAL Project*. Num. ACT-ST-234-89, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, September 1989.
32. M.V. Hermenegildo, F. Rossi. *On the Correctness and Efficiency of Independent And-Parallelism in Logic Programs*. Num. ACA-ST-032-89, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, January 1989.
33. M.V. Hermenegildo, E. Tick. *Memory Performance of AND-Parallel Prolog on Shared-Memory Architectures*. Num. ACA-ST-036-88, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, January 1988.
34. M.V. Hermenegildo, E. Tick. *Performance Evaluation of the RAP-WAM Restricted AND-Parallel Architecture on Shared Memory Multiprocessors*. Num. PP-085-87, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, March 1987.
35. R. Warren, M.V. Hermenegildo. *Experimenting with Prolog: An Overview*. Num. ACA/PP 43, Microelectronics and Computer Technology Corporation (MCC), 3500 W. Balcones Center Dr. Austin, TX 78759, March 1987.
36. M.V. Hermenegildo. *Relating Goal Scheduling, Precedence, and Memory Management in AND-Parallel Execution of Logic Programs*. Num. PP-408-86, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, December 1986.
37. M.V. Hermenegildo, G. J. Lipovski, R. Warren. *Goal Scheduling and Memory Management in Parallel Logic Systems*. Num. PP-083-86, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, March 1986.
38. M.V. Hermenegildo. *A Restricted AND-parallel Execution Model and Abstract Machine for Prolog Programs*. Num. PP-104-85, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, October 1985.
39. Sanjay Deshpande, Matt Sejnowski, Manuel V. Hermenegildo, Julio de Melo, Roy Jenevein, Ashok Adiga, Allan Clarke. *TRAC (Texas Reconfigurable Array Computer) – Users’ Manual*. 1985.

9 Publications in Distributed/Internet Execution, Agents, and WWW

Articles in Refereed Journals:

1. Agostino Dovier, Andrea Formisano, Gopal Gupta, Manuel V. Hermenegildo, Enrico Pontelli, Ricardo Rocha. *Parallel Logic Programming: A Sequel*. Theory and Practice of Logic Programming, 20th Anniversary Special Issue, Vol. 22, Num. 6, pages 905–973, Cambridge U. Press, March 2022.
2. D. Cabeza, M.V. Hermenegildo. *Distributed WWW Programming using (Ciao) Prolog and the PiLLOW Library*. Theory and Practice of Logic Programming, Vol. 1, Num. 3, pages 251–282, Cambridge U. Press, May 2001.
3. M. García de la Banda, M.V. Hermenegildo, K. Marriott. *Independence in CLP Languages*. ACM Transactions on Programming Languages and Systems, Vol. 22, Num. 2, pages 269–339, ACM Press, March 2000.

Articles in Refereed Conferences:

1. Dragan Ivanovic, Manuel Carro. *Transforming Service Compositions into Cloud-Friendly Actor Networks*. Service-Oriented Computing - 12th International Conference, ICSOC 2014, Paris, France, November 3-6, 2014. Proceedings, LNCS, Vol. 8831, pages 291–305, Springer Verlag, November 2014.
2. Dragan Ivanović, Manuel Carro, Peerachai Kaowichakorn. *Towards QoS Prediction Based on Composition Structure Analysis and Probabilistic Models*. Service-Oriented Computing - 12th International Conference, ICSOC, LNCS, Vol. 8831, pages 394–402, Springer Verlag, November 2014.
3. D. Ivanovic, M. Carro, M.V. Hermenegildo. *A Constraint-Based Approach to Quality Assurance in Service Choreographies*. 10th International Conference on Service Oriented Computing, ICSOC'12, LNCS, Vol. 7637, Springer Verlag, November 2012.
4. D. Ivanović, M. Carro, M.V. Hermenegildo. *Constraint-Based Runtime Prediction of SLA Violations in Service Orchestrations*. Service-Oriented Computing – ICSOC 2011, LNCS, Vol. 7084, pages 62–76, Springer Verlag, December 2011. Best paper award.
5. D. Ivanović, M. Carro, M.V. Hermenegildo. *Automated Attribute Inference in Complex Service Workflows Based on Sharing Analysis*. Proceedings of the 8th IEEE Conference on Services Computing SCC 2011, pages 120–127, IEEE Press, July 2011.
6. D. Ivanović, M. Carro, M.V. Hermenegildo. *Automatic Fragment Identification in Workflows Based on Sharing Analysis*. Service-Oriented Computing – ICSOC 2010, LNCS, Vol. 6470, pages 350–364, Springer Verlag, 2010.
7. Mohamed Anis Zemni, Salima Benbernou, M. Carro. *A Soft Constraint-Based Approach to QoS-Aware Service Selection*. Service-Oriented Computing – ICSOC 2010, LNCS, Vol. 6470, pages 596–602, Springer Verlag, 2010.
8. D. Ivanović, M. Carro, M.V. Hermenegildo. *Towards Data-Aware QoS-Driven Adaptation for Service Orchestrations*. Proceedings of the 2010 IEEE International Conference on Web Services (ICWS 2010), Miami, FL, USA, 5-10 July 2010, pages 107–114, IEEE, 2010.
9. M. Carro, M.V. Hermenegildo. *Concurrency in Prolog Using Threads and a Shared Database*. 1999 International Conference on Logic Programming, pages 320–334, MIT Press, Cambridge, MA, USA, November 1999.

10. M.V. Hermenegildo, D. Cabeza, M. Carro. *Using Attributed Variables in the Implementation of Concurrent and Parallel Logic Programming Systems*. Proc. of the Twelfth International Conference on Logic Programming, pages 631–645, MIT Press, June 1995.
11. P. Lopez-Garcia, M.V. Hermenegildo. *Efficient Term Size Computation for Granularity Control*. International Conference on Logic Programming, pages 647–661, MIT Press, Cambridge, MA, June 1995.
12. M.V. Hermenegildo, The CLIP Group. *Some Methodological Issues in the Design of CIAO - A Generic, Parallel, Concurrent Constraint System*. Principles and Practice of Constraint Programming, LNCS, Num. 874, pages 123–133, Springer-Verlag, May 1994.
13. M. García de la Banda, M.V. Hermenegildo, K. Marriott. *Independence in Constraint Logic Programs*. 1993 International Logic Programming Symposium, pages 130–146, MIT Press, Cambridge, MA, October 1993.

Books and Monographs:

1. J. Navas. *CoLogNetWS: Desarrollo de un Sitio Web con Actualización Distribuida de las Bases de Datos en varios nodos*. Ms. Thesis, Technical University of Madrid, School of Computer Science, E-28660, Boadilla del Monte, Madrid, Spain, 196 pages, December 2003.
2. L. Sterling, L. Naish, M.V. Hermenegildo. *Theory and Practice of Logic Programming – Special Issue: Logic Programming and the INTERNET*. Vol. 1, Num. 3, 131 pages, Cambridge U. Press, May 2001.
3. P. Lopez-Garcia. *Non-failure Analysis and Granularity Control in Parallel Execution of Logic Programs*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informatica UPM, 28660-Boadilla del Monte, Madrid-Spain, June 2000.
4. J.M. Gómez. *WebDB: Un Interfaz WWW a Bases de Datos Genérico*. Ms. Thesis, Technical University of Madrid, School of Computer Science, E-28660, Boadilla del Monte, Madrid, Spain, 156 pages, September 1999.

Invited Papers and Tutorials:

1. D. Ivanović, M. Carro, M.V. Hermenegildo. *Constraint-Based Runtime Prediction of SLA Violations in Service Orchestrations*. 22nd Workshop on Logic-based Methods in Programming Environments, 1 pages, September 2012. (abstract of invited talk).
2. The Ciao Development Team. *The Ciao Multiparadigm Language and Program Development Environment*. 6 pages, November 2006. The ALP Newsletter 19(3). The Association for Logic Programming..
3. F. Bueno, D. Cabeza, M. Carro, J. Correas, J. Gómez, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla, C. Vaucheret. *Agent Programming in Ciao Prolog*. 10 th. Portuguese Conference on Artificial Intelligence (EPIA), LNAI, Num. 2258, 2 pages, Springer-Verlag, December 2001.

Articles in Books and Other Collections:

1. M.V. Hermenegildo, F. Bueno, D. Cabeza, M. Carro, M. García de la Banda, P. Lopez-Garcia, G. Puebla. *The CIAO Multi-Dialect Compiler and System: An Experimentation Workbench for Future (C)LP Systems*. Parallelism and Implementation of Logic and Constraint Logic Programming, pages 65–85, Nova Science, April 1999.

Publications in Refereed Workshops:

1. D. Ivanović, M. Carro, M.V. Hermenegildo. *Exploring the Impact of Inaccuracy and Imprecision of QoS Assumptions on Proactive Constraint-Based QoS Prediction for Service Orchestrations*. Proceedings of the 4th International Workshop on Principles of Engineering Service-Oriented Systems, PESOS 2012, pages 931–937, IEEE Press, June 2012.
2. D. Ivanović, M. Carro, M.V. Hermenegildo. *Constraint-Based Runtime Prediction of SLA Violations in Service Orchestrations*. XII Jornadas sobre Programación y Lenguajes (PROLE), Universidad de Almería, 2012.
3. D. Ivanović, M. Carro, M.V. Hermenegildo. *An Initial Proposal for Data-Aware Resource Analysis of Orchestrations with Applications to Predictive Monitoring*. International Workshops, ICSOC/ServiceWave 2009, Revised Selected Papers, LNCS, Num. 6275, Springer, September 2010.
4. D. Ivanović, M. Carro, M.V. Hermenegildo. *An Initial Proposal for Data-Aware Resource Analysis of Orchestrations with Applications to Proactive Monitoring*. Pre-proceedings of the 2nd Workshop on Monitoring, Adaptation and Beyond (MONA+), November 2009.
5. M.V. Hermenegildo, The Ciao Development Team. *An Overview of The Ciao Multiparadigm Language and Program Development Environment and its Design Philosophy*. ECOOP Workshop on Multiparadigm Programming with Object-Oriented Languages MPOOL 2007, July 2007.
6. J. Correas, F. Bueno. *A Configuration Framework for Distributed Logic Applications*. Proc. of the AGP'2002 Joint Conference on Declarative Programming, pages 123–137, Facultad de Informatica, September 2002.
7. M. Carro, M.V. Hermenegildo. *A Simple Approach to Distributed Objects in Prolog*. Colloquium on Implementation of Constraint and LOGic Programming Systems (ICLP associated workshop), July 2002.
8. J. Correas, F. Bueno. *A Configuration Framework to Develop and Deploy Distributed Logic Applications*. ICLP01 Colloquium on Implementation of Constraint and LOGic Programming Systems, 15 pages, November 2001.
9. D. Cabeza, M.V. Hermenegildo. *WWW Programming using Computational Logic Systems (and the PiLLOW/Ciao Library)*. Proceedings of the Workshop on Logic Programming and the WWW at WWW6, April 1997.
10. D. Cabeza, M.V. Hermenegildo, S. Varma. *The PiLLOW/Ciao Library for INTERNET/WWW Programming using Computational Logic Systems*. Proceedings of the 1st Workshop on Logic Programming Tools for INTERNET Applications, pages 72–90, September 1996. Text and code available from <https://www.cliplab.org/miscdocs/pillow/pillow.html>.
11. D. Cabeza, M.V. Hermenegildo. *Implementing Distributed Concurrent Constraint Execution in the CIAO System*. Proc. of the AGP'96 Joint conference on Declarative Programming, pages 67–78, U. of the Basque Country, July 1996. Available from <https://www.cliplab.org/>.
12. D. Cabeza, M.V. Hermenegildo. *Distributed Concurrent Constraint Execution in the CIAO System*. Proc. of the 1995 COMPULOG-NET Workshop on Parallelism and Implementation Technologies, U. Utrecht / T.U. Madrid, September 1995. Available from <https://www.cliplab.org/>.
13. M.V. Hermenegildo, D. Cabeza, M. Carro. *On The Uses of Attributed Variables in Parallel and Concurrent Logic Programming Systems*. Proc. of the 1994 COMPULOG-NET Workshop Parallelism and Implementation Technologies, 15 pages, U. of Madrid, September 1994. Also provided as attachment UPM-1 of deliverable D4.3/2.

14. P. Lopez-Garcia, M.V. Hermenegildo. *Towards Dynamic Term Size Computation via Program Transformation*. Second Spanish Conference on Declarative Programming, pages 73–93, IIIA/CSIC, September 1993.

Technical Reports and Manuals:

1. D. Ivanović, M. Carro, M.V. Hermenegildo. *Automated Attribute Inference in Complex Service Workflows Based on Sharing Analysis*. Num. CLIP5/2010.0, Technical University of Madrid (UPM), December 2010.
2. D. Ivanović, M. Carro, M.V. Hermenegildo. *Automatic Fragment Identification in Workflows Based on Sharing Analysis*. Num. CLIP4/2010.0, 15 pages, Technical University of Madrid (UPM), June 2010. Submitted.
3. D. Ivanović, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, E. Mera. *Towards Data-Aware Cost-Driven Adaptation for Service Orchestrations*. Num. CLIP5/2009.1, Technical University of Madrid (UPM), March 2010.
4. D. Ivanović, M. Carro, M.V. Hermenegildo. *Sharing-Based Independence-Driven Fragment Identification for Service Orchestrations*. Num. CLIP7/2009.0, Technical University of Madrid (UPM), December 2009.
5. D. Ivanović, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, E. Mera. *Towards Data-Aware Cost-Driven Adaptation for Service Orchestrations*. Num. CLIP5/2009.0, Technical University of Madrid (UPM), November 2009. Replaced by a later version.
6. D. Ivanović, M. Carro, M.V. Hermenegildo. *Towards Data-Aware Resource Analysis for Service Orchestrations*. Num. CLIP3/2009.0, Technical University of Madrid (UPM), June 2009.
7. M.V. Hermenegildo, The Ciao Development Team. *Why Ciao? –An Overview of the Ciao System’s Design Philosophy*. Num. CLIP7/2006.0, 6 pages, Technical University of Madrid (UPM), December 2006. Available from: <https://cliplab.org/papers/ciao-philosophy-note-tr.pdf>.
8. A. Kostenko, M. Carro. *A Preliminary DHT Infrastructure for Ciao*. Num. CLIP12/2006.0, Technical University of Madrid (UPM), August 2006.
9. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla (Eds.). *The Ciao System. Reference Manual (V1.10)*. School of Computer Science, Technical University of Madrid (UPM), June 2004. System and on-line version of the manual available at <https://ciao-lang.org>.
10. J. Navas, D. Cabeza, M.V. Hermenegildo. *CoLogNetWS: Development of a Web Site with Database Multinode Distributed Update*. Num. CLIP6/2003.0, 157 pages, CoLogNet Project, November 2003.
11. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.8)*. Num. CLIP4/2002.1, School of Computer Science, Technical University of Madrid (UPM), May 2002. System and on-line version of the manual available at <https://ciao-lang.org>.
12. F. Bueno, J. Correias. *Active Module Service*. Num. CLIP4/2001.1, Facultad de Informática, UPM, Technical University of Madrid (UPM), 2001.
13. M. Carro, M.V. Hermenegildo. *Remote Execution and Mobile Objects in Ciao Prolog*. Num. CLIP3/2001.1, Facultad de Informática, UPM, Technical University of Madrid (UPM), 2001.

14. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.6)*. Num. CLIP5/2000.1, School of Computer Science, Technical University of Madrid (UPM), July 2000. System and on-line version of the manual available at <https://ciao-lang.org>.
15. Per Cederberg, The CLIP Group. *Flexible Layout and Styling – The LaSt Language*. Num. D2.2.M3 CLIP 3/99.0, 32 pages, RADIOWEB Project, June 1999.
16. Per Cederberg, The CLIP Group. *The LaSt Engine*. Num. D3.3.M3 CLIP 4/99.0, 42 pages, RADIOWEB Project, June 1999.
17. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.0)*. Num. CLIP11/99.1, School of Computer Science, Technical University of Madrid (UPM), June 1999. System and on-line version of the manual available at <https://ciao-lang.org>.
18. D. Cabeza, S. Genaim, C. Taboch. *WOF Interpreter and GDA Installation Guide and Demo*. Num. D3.1.M2-A4, 10 pages, RADIOWEB Project, December 1998.
19. I. Caballero, D. Cabeza, S. Genaim, J.M. Gomez, M.V. Hermenegildo. *persdb_sql: SQL Persistent Database Interface*. Num. CLIP10/98.0, 39 pages, December 1998.
20. J.M. Gomez, D. Cabeza, M.V. Hermenegildo. *WebDB: A Database WWW Interface*. Num. CLIP11/98.0, 32 pages, December 1998.
21. D. Cabeza, M.V. Hermenegildo, S. Genaim, C. Taboch. *Design of a Generic, Homogeneous Interface to Relational Databases*. Num. D3.1.M1-A1, CLIP7/98.0, 10 pages, September 1998.
22. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V0.6)*. Num. CLIP12/98.1, School of Computer Science, Technical University of Madrid (UPM), July 1998. System and on-line version of the manual available at <https://ciao-lang.org>.
23. D. Cabeza, M.V. Hermenegildo. *A WWW Database Management Interface for Prolog*. Num. CLIP2/98.0, School of Computer Science, Technical University of Madrid (UPM), June 1998.
24. D. Cabeza, S. Genaim, C. Taboch. *WOF Design*. Num. D2.1.M2, 14 pages, RADIOWEB Project, January 1998.
25. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual*. Num. CLIP3/97.1, School of Computer Science, Technical University of Madrid (UPM), August 1997. System and on-line version of the manual available at <https://ciao-lang.org>.
26. The RADIOWEB Project Partners. *RADIOWEB EP25562: Automatic Generation of Web Sites for the Radio Broadcasting Industry – Project Description / Technical Annex*. 70 pages, RADIOWEB Project, July 1997.
27. D. Cabeza, M.V. Hermenegildo. *html.pl: An HTML Package for (C)LP systems*. Technical University of Madrid, March 1996. Available from <https://www.cliplab.org/miscdocs/>.
28. M.V. Hermenegildo. *A WWW Interface Library for LP and CLP Systems*. Num. CLIP16/95.0, School of Computer Science, Technical University of Madrid (UPM), December 1995.
29. M.V. Hermenegildo, D. Cabeza, M. Carro. *On The Uses of Attributed Variables in Parallel and Concurrent Logic Programming Systems*. Num. CLIP 5/94.0, 17 pages, School of Computer Science, Technical University of Madrid (UPM), June 1994. Presented at the ILPS'94 Post Conference Workshop on Design and Implementation of Parallel Logic Programming Systems, Available from <https://www.cliplab.org/>.

30. M.V. Hermenegildo. *A Simple, Distributed Version of the \mathcal{E} -Prolog System*. School of Computer Science, Technical University of Madrid (UPM), April 1994. Available from <https://www.cliplab.org/>.
31. M.V. Hermenegildo, P. Lopez-Garcia. *A Technique for Dynamic Term Size Computation via Program Transformation*. Num. CLIP 8/93.1(94), School of Computer Science, Technical University of Madrid, March 1994.
32. P. Lopez-Garcia, M.V. Hermenegildo. *Dynamic Term Size Computation in Logic Programs via Program Transformation*. Num. CLIP 8/93.0, T.U. of Madrid (UPM), April 1993. Presented at the 1993 COMPULOG Area Meeting on Parallelism and Implementation Technologies.

10 Publications in (Parallel) Computer Architecture

Articles in Refereed Journals:

1. M.V. Hermenegildo, E. Tick. *Memory Referencing Characteristics and Caching Performance of AND-Parallel Prolog on Shared-Memory Architectures*. New Generation Computing, Vol. 7, Num. 1, pages 37–58, Springer Verlag, October 1989.

Articles in Refereed Conferences:

1. C. Carreras, C. López-Barrio, M.V. Hermenegildo. *Analytic Model of a Cache-only Memory Architecture*. Parallel Architectures and Languages Europe – PARLE’94, LNCS, Num. 817, pages 336–351, Springer-Verlag, July 1994.
2. M.V. Hermenegildo, E. Tick. *Memory Performance of AND-Parallel Prolog on Shared-Memory Architectures*. Proceedings of the 17th International Conference on Parallel Processing, pages 17–22, IEEE, August 1988.

Books and Monographs:

1. M.V. Hermenegildo. *An Abstract Machine Based Execution Model for Computer Architecture Design and Efficient Implementation of Logic Programs in Parallel*. Ph.D. Thesis, Dept. of Electrical and Computer Engineering (Dept. of Computer Science TR-86-20), University of Texas at Austin, Austin, Texas 78712, 244 pages, UMI, Boston, MA and U. of Texas, August 1986.
2. M.V. Hermenegildo. *Computational Models for Sequential and Parallel Execution of Logic Programs on a Reconfigurable Architecture*. Ms. Thesis, The University of Texas at Austin, ENS Bldg. 515, Austin, TX 78712, 122 pages, June 1984.

Articles in Books and Other Collections:

1. M.V. Hermenegildo. *Research on Parallel Logic Language Implementation and Architecture at ICOT*. The ICOT Research Exchange Report, Vol. 2, pages 157–174, Institute for New Generation Computer Technology (ICOT), June 1992.

Technical Reports and Manuals:

1. C. Carreras, M.V. Hermenegildo. *Towards an Analytical Model of the Data Diffusion Machine*. UPM (PEPMA ESPRIT Project technical report), 1990.
2. M.V. Hermenegildo, E. Tick. *Memory Performance of AND-Parallel Prolog on Shared-Memory Architectures*. Num. ACA-ST-036-88, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, January 1988.
3. M.V. Hermenegildo, E. Tick. *Performance Evaluation of the RAP-WAM Restricted AND-Parallel Architecture on Shared Memory Multiprocessors*. Num. PP-085-87, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, March 1987.
4. M.V. Hermenegildo, P. McGehearty. *Address Escaping and Reference Classification in the Design of a Cached, Multiple Cluster, Shared-Memory Architecture*. Num. PP-SRS-TM-12, MCC, Parallel Processing Program, 1987.
5. Sanjay Deshpande, Matt Sejnowski, Manuel V. Hermenegildo, Julio de Melo, Roy Jenevein, Ashok Adiga, Allan Clarke. *TRAC (Texas Reconfigurable Array Computer) – Users’ Manual*. 1985.

11 Publications in Program Execution Visualization

Articles in Refereed Journals:

1. G. Gupta, E. Pontelli, K. Ali, M. Carlsson, M.V. Hermenegildo. *Parallel Execution of Prolog Programs: a Survey*. ACM Transactions on Programming Languages and Systems, Vol. 23, Num. 4, pages 472–602, ACM Press, July 2001.

Articles in Refereed Conferences:

1. G. Smedbäck, M. Carro, M.V. Hermenegildo. *Interfacing Prolog and VRML and its Application to Constraint Visualization*. The Practical Application of Constraint Technologies and Logic programming, pages 453–471, The Practical Application Company, April 1999.
2. M. Carro, L. Gómez, M.V. Hermenegildo. *Some Paradigms for Visualizing Parallel Execution of Logic Programs*. 1993 International Conference on Logic Programming, pages 184–201, MIT Press, June 1993.

Books and Monographs:

1. P. Deransart, M.V. Hermenegildo, J. Maluszynski. *Analysis and Visualization Tools for Constraint Programming*. LNCS, Num. 1870, 350 pages, Springer-Verlag, September 2000.
2. I. Martín. *Una Librería Gráfica para Prolog*. Ms. Thesis, Technical University of Madrid, School of Computer Science, E-28660, Boadilla del Monte, Madrid, Spain, July 2000. In Spanish.
3. J.M. Ramos. *VIFID: Variable Visualization for Constraint Domains*. Ms. Thesis, Technical University of Madrid, School of Computer Science, E-28660, Boadilla del Monte, Madrid, Spain, September 1998.
4. A. López Luengo. *APT: implementación de un visualizador gráfico de la ejecución de programas lógicos*. Ms. Thesis, Technical University of Madrid, School of Computer Science, E-28660, Boadilla del Monte, Madrid, Spain, October 1997. In Spanish.

Articles in Books and Other Collections:

1. M. Carro, M.V. Hermenegildo. *Visualization Designs for Constraint Logic Programming*. Vol. 2, Num. 2, pages 27–34, Swiss Informatics Societies, April 2001. Also in UPGRADE. Available through <https://www.svifsi.ch/revue/>.
2. M. Carro, M.V. Hermenegildo. *Diseño de visualizaciones para programación lógica con restricciones*. Num. 150, pages 31–37, Asociación de Técnicos en Informática, March 2001.
3. M. Carro, M.V. Hermenegildo. *Tools for Search Tree Visualization: The APT Tool*. Analysis and Visualization Tools for Constraint Programming, LNCS, Num. 1870, pages 237–252, Springer-Verlag, September 2000.
4. M. Carro, M.V. Hermenegildo. *Tools for Constraint Visualization: The VIFID/TRIFID Tool*. Analysis and Visualization Tools for Constraint Programming, LNCS, Num. 1870, pages 253–272, Springer-Verlag, September 2000.

Publications in Refereed Workshops:

1. M. Carro, M.V. Hermenegildo. *Some Design Issues in the Visualization of Constraint Program Execution*. AGP'98 Joint Conference on Declarative Programming, pages 71–86, July 1998.
2. M. Carro, L. Gómez, M.V. Hermenegildo. *Implementation of an Event Driven Scheme for Visualizing Parallel Execution of Logic Programs*. JICSLP'92 Workshop on Parallel Execution, 15 pages, November 1992.
3. M. Carro, L. Gómez, M.V. Hermenegildo. *Implementation of an Event Driven Scheme for Visualizing Parallel Execution of Logic Programs*. Primer Congreso Nacional de Programación Declarativa, pages 262–278, FIM/UPM, September 1992.

Technical Reports and Manuals:

1. M.V. Hermenegildo, E. Albert, P. Arenas, F. Bueno, M. Carro, A. Casas, P. Chico de Guzmán, J. Correas, S. Genaim, J. Lipton, Pedro Lopez-Garcia, M. Méndez, E. Mera, J. Morales, J. Navas, R. Padilla, P. Pietrzak, G. Puebla, M. Zamalloa, D. Zanardini. *Rigorous Methods for Mobile and Heterogeneous Software Systems – Second Year Report*. Num. CLIP3/2008.0, Technical University of Madrid (UPM), April 2008.
2. M.V. Hermenegildo, E. Albert, P. Arenas, A. Beascoa, F. Bueno, D. Cabeza, M. Carro, J. Correas, A. García Pañoso, J. Lipton, P. Lopez-Garcia, E. Mera, J. Morales, C. Ochoa, G. Puebla. *Rigorous Methods for Mobile and Heterogeneous Software Systems – First Year Report*. Num. CLIP4/2007.0, Technical University of Madrid (UPM), March 2007.
3. M. Carro, M.V. Hermenegildo. *Some Issues in the Design of Visualizations for Constraint Logic Program Execution*. Num. CLIP2/99.1, 17 pages, Technical University of Madrid (UPM), March 1999. Also as deliverable of the ESPRIT project DISCIPL.
4. J.M. Ramos. *vifid: Variable Visualization for Finite Domains*. Num. CLIP4/98.0, 58 pages, Technical University of Madrid, September 1998.
5. J.M. Ramos, M. Carro. *VIFID User's Manual*. Num. CLIP3/98.0, 25 pages, Technical University of Madrid, September 1998.
6. A. López, M. Carro. *A User Guide to APT*. Num. CLIP6/97.1, 12 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), September 1997.
7. M. Carro, M.V. Hermenegildo. *Some Design Issues in Constraint Program Visualization and Abstraction*. Num. CLIP1/97.1, 20 pages, Technical University of Madrid (UPM), September 1997. Also as deliverable of the ESPRIT project DISCIPL.
8. M. Carro, L. Gómez, M.V. Hermenegildo. *Using VisAndOr to Debug and Understand Parallel Execution of Logic Programs*. Num. CLIP 1/93.0, School of Computer Science, Technical University of Madrid, February 1993.
9. M. Carro, L. Gómez, M.V. Hermenegildo. *VISANDOR: A Tool for Visualizing And-/Or-parallelism in Logic Programs*. Num. CLIP9/91.0, 17 pages, T.U. of Madrid (UPM), June 1991.
10. M.V. Hermenegildo, R. I. Nasr. *A Tool for Visualizing Independent And-parallelism in Logic Programs*. Num. CLIP1/90.0, T.U. of Madrid (UPM), 1990. Presented at the NACL90 Workshop on Parallel Logic Programming, Austin, TX.

12 Publications in Programming Language Design

Articles in Refereed Journals:

1. Daniela Ferreiro, Ignacio Casso, Pedro Lopez-Garcia, José F. Morales, Manuel V. Hermenegildo. *Checkification: A Practical Approach for Testing Static Analysis Truths*. Theory and Practice of Logic Programming, To Appear, Cambridge U. Press, May 2025.
2. Philipp Körner, Michael Leuschel, João Barbosa, Vítor Santos-Costa, Verónica Dahl, Manuel V. Hermenegildo, Jose F. Morales, Jan Wielemaker, Daniel Diaz, Salvador Abreu, Giovanni Ciatto. *Fifty Years of Prolog and Beyond*. Theory and Practice of Logic Programming, 20th Anniversary Special Issue, Vol. 22, Num. 6, pages 776–858, Cambridge U. Press, May 2022.
3. Agostino Dovier, Andrea Formisano, Gopal Gupta, Manuel V. Hermenegildo, Enrico Pontelli, Ricardo Rocha. *Parallel Logic Programming: A Sequel*. Theory and Practice of Logic Programming, 20th Anniversary Special Issue, Vol. 22, Num. 6, pages 905–973, Cambridge U. Press, March 2022.
4. Joaquín Arias, Manuel Carro. *Evaluation of the Implementation of an Abstract Interpretation Algorithm using Tabled CLP*. Theory and Practice of Logic Programming, Vol. 19, Num. 5-6, pages 1107–1123, September 2019. Special Issue on ICLP'19.
5. Joaquín Arias, Manuel Carro. *Description, Implementation, and Evaluation of a Generic Design for Tabled CLP*. Theory and Practice of Logic Programming, Vol. 19, Num. 3, pages 412–448, Cambridge U. Press, May 2019.
6. P. Lopez-Garcia, L. Darmawan, M. Klemen, U. Liqat, F. Bueno, M.V. Hermenegildo. *Interval-based Resource Usage Verification by Translation into Horn Clauses and an Application to Energy Consumption*. Theory and Practice of Logic Programming, Special Issue on Computational Logic for Verification, Vol. 18, Num. 2, pages 167–223, Cambridge U. Press, March 2018. arXiv:1803.04451.
7. Joaquín Arias, Manuel Carro, Elmer Salazar, Kyle Marple, Gopal Gupta. *Constraint Answer Set Programming without Grounding*. Theory and Practice of Logic Programming, Vol. 18, Num. 3-4, pages 337–354, Cambridge U. Press, 2018.
8. I. Garcia-Contreras, J. F. Morales, M.V. Hermenegildo. *Semantic Code Browsing*. Theory and Practice of Logic Programming, 32nd Int'l. Conference on Logic Programming (ICLP'16) Special Issue, Vol. 16, Num. 5-6, pages 721–737, Cambridge U. Press, September 2016.
9. P. Lopez-Garcia, M. Klemen, U. Liqat, M.V. Hermenegildo. *A General Framework for Static Profiling of Parametric Resource Usage*. Theory and Practice of Logic Programming, 32nd Int'l. Conference on Logic Programming (ICLP'16) Special Issue, Vol. 16, Num. 5-6, pages 849–865, Cambridge U. Press, September 2016.
10. J.F. Morales, M. Carro, M.V. Hermenegildo. *Description and Optimization of Abstract Machines in a Dialect of Prolog*. Theory and Practice of Logic Programming, Vol. 16, Num. 1, pages 1–58, Cambridge University Press, January 2016.
11. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Practical Run-time Checking via Unobtrusive Property Caching*. Theory and Practice of Logic Programming, 31st Int'l. Conference on Logic Programming (ICLP'15) Special Issue, Vol. 15, Num. 04-05, pages 726–741, Cambridge U. Press, September 2015. <https://arxiv.org/abs/1507.05986>.

12. A. Serrano, P. Lopez-Garcia, M.V. Hermenegildo. *Resource Usage Analysis of Logic Programs via Abstract Interpretation Using Sized Types*. Theory and Practice of Logic Programming, 30th Int'l. Conference on Logic Programming (ICLP'14) Special Issue, Vol. 14, Num. 4-5, pages 739–754, Cambridge U. Press, July 2014.
13. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *An Overview of Ciao and its Design Philosophy*. Theory and Practice of Logic Programming, Vol. 12, Num. 1–2, pages 219–252, Cambridge University Press, January 2012.
14. J. F. Morales, R. Haemmerlé, M. Carro, M.V. Hermenegildo. *Lightweight compilation of (C)LP to JavaScript*. Theory and Practice of Logic Programming, 28th Int'l. Conference on Logic Programming (ICLP'12) Special Issue, Vol. 12, Num. 4-5, pages 755–773, Cambridge U. Press, 2012.
15. P. Chico de Guzmán, A. Casas, M. Carro, M.V. Hermenegildo. *Parallel Backtracking with Answer Memoing for Independent And-Parallelism*. Theory and Practice of Logic Programming, 27th Int'l. Conference on Logic Programming (ICLP'11) Special Issue, Vol. 11, Num. 4–5, pages 555–574, Cambridge U. Press, July 2011.
16. R. Haemmerlé. *(Co)-Inductive Semantics for Constraint Handling Rules*. Theory and Practice of Logic Programming, 27th Int'l. Conference on Logic Programming (ICLP'11) Special Issue, Vol. 11, Num. 4–5, pages 593–609, Cambridge U. Press, July 2011.
17. R. Haemmerlé. *Observational Equivalences for Linear Logic Concurrent Constraint Languages*. Theory and Practice of Logic Programming, 27th Int'l. Conference on Logic Programming (ICLP'11) Special Issue, Vol. 11, Num. 4–5, pages 469–485, Cambridge U. Press, July 2011.
18. P. Chico de Guzmán, M. Carro, David S. Warren. *Swapping Evaluation: A Memory-Scalable Solution for Answer-On-Demand Tabling*. Theory and Practice of Logic Programming, 26th Int'l. Conference on Logic Programming (ICLP'10) Special Issue, Vol. 10 (4–6), pages 401–416, Cambridge U. Press, July 2010.
19. Mary DeMarco, James Lipton. *Completeness and Cut Elimination in Church's Intuitionistic Theory of Types*. J. of Logic and Computation, Vol. 15, Num. 6, pages 821–854, 2005.
20. Stacy E. Finkelstein, Peter Freyd, James Lipton. *A New Framework for Declarative Programming*. Theoretical Computer Science, Vol. 300, Num. 1–3, pages 91–160, Elsevier Science, May 2003.
21. G. Gupta, E. Pontelli, K. Ali, M. Carlsson, M.V. Hermenegildo. *Parallel Execution of Prolog Programs: a Survey*. ACM Transactions on Programming Languages and Systems, Vol. 23, Num. 4, pages 472–602, ACM Press, July 2001.
22. M.V. Hermenegildo, K. Greene. *The \mathcal{E} -Prolog System: Exploiting Independent And-Parallelism*. New Generation Computing, Vol. 9, Num. 3,4, pages 233–257, Springer Verlag, 1991.

Articles in Refereed Conferences:

1. Ignacio Casso, José F. Morales, Pedro López-García, Manuel V. Hermenegildo. *Testing Your (Static Analysis) Truths*. Logic-Based Program Synthesis and Transformation - 30th International Symposium, Post-Proceedings, Lecture Notes in Computer Science, Vol. 12561, pages 271–292, Springer, 2021.
2. I. Casso, J. F. Morales, P. Lopez-Garcia, R. Giacobazzi, M.V. Hermenegildo. *Computing Abstract Distances in Logic Programs*. Post-Proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), LNCS, Vol. 12042, pages 57–72, Springer-Verlag, April 2020.

3. I. Casso, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *An Integrated Approach to Assertion-Based Random Testing in Prolog*. Post-Proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), LNCS, Vol. 12042, pages 159–176, Springer-Verlag, April 2020.
4. R. Bruni, R. Giacobazzi, R. Gori, I. Garcia-Contreras, D. Pavlovic. *Abstract Extensionality – On the Properties of Incomplete Abstract Interpretations*. Proc. ACM Symposium on Principles of Programming Languages 2020, January 2020.
5. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Incremental Analysis of Logic Programs with Assertions and Open Predicates*. Proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), LNCS, Vol. 12042, pages 36–56, Springer, 2020.
6. Joaquín Arias, Zhuo Chen, Manuel Carro, Gopal Gupta. *Modeling and Reasoning in Event Calculus Using Goal-Directed Constraint Answer Set Programming*. Post-Proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), LNCS, Vol. 12042, pages 139–155, Springer-Verlag, 2020.
7. Joaquín Arias, Manuel Carro. *Incremental Evaluation of Lattice-Based Aggregates in Logic Programming Using Modular TCLP*. 21st Int'l. Symposium on Practical Aspects of Declarative Languages, LNCS, Vol. 11372, pages 98–114, Springer, January 2019.
8. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Multivariant Assertion-based Guidance in Abstract Interpretation*. Post-Proceedings of the 28th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'18), LNCS, Num. 11408, pages 184–201, Springer-Verlag, January 2019.
9. M. Klemen, N. Stulova, P. Lopez-Garcia, J. F. Morales, M.V. Hermenegildo. *Static Performance Guarantees for Programs with Run-time Checks*. 20th Int'l. ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming (PPDP'18), 13 pages, ACM Press, September 2018.
10. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Exploiting Term Hiding to Reduce Runtime Checking Overhead*. 20th International Symposium on Practical Aspects of Declarative Languages (PADL 2018), LNCS, Num. 10702, pages 99–115, Springer-Verlag, January 2018.
11. U. Liqat, Z. Banković, P. Lopez-Garcia, M.V. Hermenegildo. *Inferring Energy Bounds via Static Program Analysis and Evolutionary Modeling of Basic Blocks*. Logic-Based Program Synthesis and Transformation - 27th International Symposium, LOPSTR 2017, Namur, Belgium, October 10-12, 2017, Revised Selected Papers, Lecture Notes in Computer Science, Vol. 10855, Springer, 2018.
12. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Reducing the Overhead of Assertion Runtime Checks via Static Analysis*. 18th Int'l. ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming (PPDP'16), pages 90–103, ACM Press, September 2016.
13. Salvador Tamarit, Guillermo Viguera, Manuel Carro, Julio Mariño. *A Haskell Implementation of a Rule-Based Program Transformation for C Programs*. International Symposium on Practical Aspects of Declarative Languages, LNCS, Num. 9131, pages 105–114, Springer-Verlag, June 2015.
14. J.F. Morales, M.V. Hermenegildo. *Pre-Indexed Terms for Prolog*. Post-Proceedings of the 24th International Symposium on Logic-Based Program Synthesis and Transformation (LOPSTR'14), LNCS, Vol. 8981, pages 317–331, Springer, 2015.

15. R. Haemmerlé. *On Combining Backward and Forward Chaining in Constraint Logic Programming*. 16th Int'l. ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming (PPDP'14), 12 pages, ACM Press, September 2014.
16. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Assertion-based Debugging of Higher-Order (C)LP Programs*. 16th Int'l. ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming (PPDP'14), pages 225–235, ACM Press, September 2014.
17. U. Liqat, S. Kerrison, A. Serrano, K. Georgiou, P. Lopez-Garcia, N. Grech, M.V. Hermenegildo, K. Eder. *Energy Consumption Analysis of Programs based on XMOS ISA-Level Models*. Logic-Based Program Synthesis and Transformation, 23rd International Symposium, LOPSTR 2013, Revised Selected Papers, Lecture Notes in Computer Science, Vol. 8901, pages 72–90, Springer, 2014.
18. A. Serrano, P. Lopez-Garcia, F. Bueno, M.V. Hermenegildo. *Sized Type Analysis for Logic Programs*. Vol. 13, Num. 4-5, pages 1–14, Cambridge U. Press, August 2013.
19. Z. Drey, J. F. Morales, M.V. Hermenegildo, M. Carro. *Reversible Language Extensions and their Application in Debugging*. Practical Aspects of Declarative Languages (PADL'13), LNCS, Vol. 7752, Springer, January 2013.
20. P. Chico de Guzmán, M. Carro, M.V. Hermenegildo. *Supporting Pruning in Tabled LP*. Practical Aspects of Declarative Languages (PADL'13), LNCS, Springer Verlag, January 2013.
21. P. Chico de Guzmán, M. Carro, M.V. Hermenegildo, P. Stuckey. *A General Implementation Framework for Tabled CLP*. FLOPS'12, LNCS, Num. 7294, pages 104–119, Springer Verlag, May 2012.
22. P. Chico de Guzmán, M. Carro, M.V. Hermenegildo, P. Stuckey. *A General Implementation Framework for Tabled CLP*. 15th Int'l. Symposium on Functional and Logic Programming, LNCS, Vol. 7294, pages 104–119, Springer Verlag, May 2012.
23. E. Albert, P. Arenas, M. Gómez-Zamalloa. *Symbolic Execution of Concurrent Objects in CLP*. Practical Aspects of Declarative Languages (PADL'12), LNCS, Vol. 7149, pages 123–137, Springer, January 2012.
24. P. Chico de Guzmán, A. Casas, M. Carro, M.V. Hermenegildo. *A Segment-Swapping Approach for Executing Trapped Computations*. PADL'12, LNCS, Vol. 7149, pages 138–152, Springer Verlag, January 2012.
25. R. Haemmerlé, P. Lopez-Garcia, M.V. Hermenegildo. *CLP Projection for Constraint Handling Rules*. Proceedings of the 13th International ACM SIGPLAN Conference on Principles and Practice of Declarative Programming, pages 137–148, ACM Press, July 2011.
26. E. Mera, T. Trigo, P. Lopez-Garcia, M.V. Hermenegildo. *Profiling for Run-Time Checking of Computational Properties and Performance Debugging in Logic Programs*. Practical Aspects of Declarative Languages (PADL'11), Lecture Notes in Computer Science, Vol. 6539, pages 38–53, Springer-Verlag, January 2011.
27. P. Lopez-Garcia, L. Darmawan, F. Bueno. *A Framework for Verification and Debugging of Resource Usage Properties: Resource Usage Verification*. Technical Communications of the 26th Int'l. Conference on Logic Programming (ICLP'10), Leibniz International Proceedings in Informatics (LIPIcs), Vol. 7, pages 104–113, Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, July 2010.
28. E. Mera, P. Lopez-Garcia, M.V. Hermenegildo. *Integrating Software Testing and Run-Time Checking in an Assertion Verification Framework*. 25th Int'l. Conference on Logic Programming (ICLP'09), LNCS, Vol. 5649, pages 281–295, Springer-Verlag, July 2009.

29. P. Chico de Guzmán, M. Carro, M.V. Hermenegildo. *A Tabling Implementation Based on Variables with Multiple Bindings*. International Conference on Logic Programming (ICLP 2009), LNCS, Num. 5649, pages 190–204, Springer-Verlag, July 2009.
30. P. Chico de Guzmán, M. Carro, M.V. Hermenegildo. *Towards a Complete Scheme for Tabled Execution Based on Program Transformation*. 11th International Symposium on Practical Aspects of Declarative Languages (PADL'09), LNCS, Num. 5418, pages 224–238, Springer-Verlag, January 2009.
31. P. Chico de Guzmán, M. Carro, M.V. Hermenegildo. *A Sketch of a Complete Scheme for Tabled Execution Based on Program Transformation*. Int'l. Conference on Logic Programming, LNCS, Vol. 5366, pages 795–800, Springer Verlag, December 2008. Short paper.
32. A. Casas, M. Carro, M.V. Hermenegildo. *A High-Level Implementation of Non-Deterministic, Unrestricted, Independent And-Parallelism*. 24th International Conference on Logic Programming (ICLP'08), LNCS, Vol. 5366, pages 651–666, Springer-Verlag, December 2008.
33. E. Albert, P. Arenas, M. Codish, S. Genaim, G. Puebla, D. Zanardini. *Termination Analysis of Java Bytecode*. IFIP International Conference on Formal Methods for Open Object-based Distributed Systems (FMOODS'08), Lecture Notes in Computer Science, Vol. 5051, pages 2–18, Springer-Verlag, Berlin, June 2008.
34. I. Mastroeni, D. Zanardini. *Data Dependencies and Program Slicing: from Syntax to Abstract Semantics*. ACM SIGPLAN Workshop on Partial Evaluation and Semantics-based Program Manipulation (PEPM), ACM Press, New York, January 2008.
35. G. Marpons, J. Mariño, M. Carro, A. Herranz, J.J. Moreno-Navarro, L.Å. Fredlund. *Automatic Coding Rule Conformance Checking Using Logic Programming*. 10th International Symposium on Practical Aspects of Declarative Languages (PADL'08), LNCS, Vol. 4902, pages 18–34, Springer Verlag, January 2008.
36. A. Casas, M. Carro, M.V. Hermenegildo. *Towards a High-Level Implementation of Execution Primitives for Unrestricted, Independent And-parallelism*. 10th International Symposium on Practical Aspects of Declarative Languages (PADL'08), LNCS, Vol. 4902, pages 230–247, Springer-Verlag, January 2008.
37. D. Zanardini. *Analyzing Non-Interference with respect to Classes*. Proceedings of the Italian Conference on Theoretical Computer Science (ICTCS), World Scientific, October 2007.
38. A. Casas, M. Carro, M.V. Hermenegildo. *Annotation Algorithms for Unrestricted Independent And-Parallelism in Logic Programs*. 17th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'07), LNCS, Num. 4915, pages 138–153, Springer-Verlag, August 2007.
39. J.F. Morales, M. Carro, M.V. Hermenegildo. *Towards Description and Optimization of Abstract Machines in an Extension of Prolog*. Logic-Based Program Synthesis and Transformation (LOPSTR'06), LNCS, Num. 4407, pages 77–93, July 2007.
40. J. Lipton, S. Nieva. *Higher Order Logic Programming Languages with Constraints: A Semantics*. Typed Lambda Calculus and Applications (TLCA) 07, Lecture Notes in Computer Science, Num. 4583, pages 272–289, Springer, June 2007.
41. M. Carro, J. Morales, H.L. Muller, G. Puebla, M.V. Hermenegildo. *High-Level Languages for Small Devices: A Case Study*. Compilers, Architecture, and Synthesis for Embedded Systems, pages 271–281, ACM Press / Sheridan, October 2006.
42. A. Casas, D. Cabeza, M.V. Hermenegildo. *A Syntactic Approach to Combining Functional Notation, Lazy Evaluation and Higher-Order in LP Systems*. The 8th International Symposium on Functional and Logic Programming (FLOPS'06), pages 142–162, April 2006.

43. D. Zanardini. *Abstract Non-Interference in a fragment of Java bytecode*. ACM Symposium on Applied Computing (SAC), ACM Press, New York, April 2006.
44. D. Zanardini. *Higher-Order Abstract Non-Interference*. Int. Conf. on Typed Lambda Calculi and Applications (TLCA), Lecture Notes in Computer Science, Vol. 3461, Springer-Verlag, Berlin, April 2005.
45. D. Cabeza, M.V. Hermenegildo, J. Lipton. *Hiord: A Type-Free Higher-Order Logic Programming Language with Predicate Abstraction*. Ninth Asian Computing Science Conference (ASIAN'04), LNCS, Num. 3321, pages 93–108, Springer-Verlag, December 2004.
46. J. Correas, J. M. Gomez, M. Carro, D. Cabeza, M.V. Hermenegildo. *A Generic Persistence Model for CLP Systems (And Two Useful Implementations)*. Proceedings of the Sixth International Symposium on Practical Aspects of Declarative Languages, LNCS, Num. 3057, pages 104–119, Springer-Verlag, June 2004.
47. J. Correas, J. M. Gomez, M. Carro, D. Cabeza, M.V. Hermenegildo. *A Generic Persistence Model for CLP Systems*. 2003 International Conference on Logic Programming, LNCS, Num. 2916, pages 481–482, Springer-Verlag, December 2003. Extended abstract.
48. C. Vaucheret, S. Guadarrama, S. Muñoz. *Fuzzy Prolog: A Simple General Implementation using CLP(R)*. 9th International Conference on Logic for Programming Artificial Intelligence and Reasoning, October 2002.
49. S. Muñoz, J.J. Moreno-Navarro, M.V. Hermenegildo. *Efficient Negation Using Abstract Interpretation*. Proc. of the Eighth International Conference on Logic Programming and Automated Reasoning, LNAI, 15 pages, Springer-Verlag, December 2001.
50. D. Cabeza, M.V. Hermenegildo. *A New Module System for Prolog*. International Conference on Computational Logic, CL2000, LNAI, Num. 1861, pages 131–148, Springer-Verlag, July 2000.
51. M.V. Hermenegildo. *A Documentation Generator for (C)LP Systems*. International Conference on Computational Logic, CL2000, LNAI, Num. 1861, pages 1345–1361, Springer-Verlag, July 2000.
52. M. Carro, M.V. Hermenegildo. *Concurrency in Prolog Using Threads and a Shared Database*. 1999 International Conference on Logic Programming, pages 320–334, MIT Press, Cambridge, MA, USA, November 1999.
53. M.V. Hermenegildo, The CLIP Group. *Some Methodological Issues in the Design of CIAO - A Generic, Parallel, Concurrent Constraint System*. Principles and Practice of Constraint Programming, LNCS, Num. 874, pages 123–133, Springer-Verlag, May 1994.
54. H. Kuchen, J. Moreno-Navarro, M.V. Hermenegildo. *Independent AND-Parallel Implementation of Narrowing*. Proc. 4th Int'l. Symposium on Programming Language Implementation and Logic Programming, LNCS, Num. 631, pages 24–38, Springer-Verlag, August 1992.
55. M.V. Hermenegildo, K. Greene. *ℓ-Prolog and its Performance: Exploiting Independent And-Parallelism*. 1990 International Conference on Logic Programming, pages 253–268, MIT Press, Association for Logic Programming, June 1990.

Books and Monographs:

1. Cicalè Baztán, Marco. *Improvements in Ciao Prolog's Development Environment: Developing A Rich Development Environment for Ciao on Visual Studio Code*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 74 pages, June 2024. BSc Thesis.

2. David S. Warren, Veronica Dahl, Thomas Eiter, Manuel V. Hermenegildo, Robert Kowalski, Francesca Rossi. *Prolog - The Next 50 Years*. LNCS, Num. 13900, Springer, July 2023.
3. B. Accattoli, M.V. Hermenegildo (Eds.). *Proceedings of the 24th International Symposium on Principles and Practice of Declarative Programming (PPDP 2022)*. ACM ICPS Proceedings, 187 pages, ACM, September 2022.
4. Casso, Ignacio. *An Integrated Approach to Assertion-Based Random Testing in Logic Languages*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 42 pages, July 2021. MSc Thesis.
5. Pérez Carrasco, Víctor. *Improvements to Parametric Cost Analysis and its Application to Smart Contracts*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 63 pages, July 2021. MSc Thesis.
6. Pérez Carrasco, Víctor. *Analysis of Smart Contracts using Horn Clauses*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 76 pages, June 2020. BSc Thesis.
7. Casso, Ignacio. *Towards Computing Distances Among Abstract Interpretations*. Ms. Thesis, Universidad Complutense de Madrid, 60 pages, June 2018. BSc Thesis.
8. Isabel Garcia-Contreras. *Code Search: A Semantic, Abstract Interpretation-Based Approach*. Ms. Thesis, Technical University of Madrid, School of Computer Science, E-28660, Boadilla del Monte, Madrid, Spain, 103 pages, July 2016.
9. M. Klemen. *Improved Static Analysis and Verification of Energy Consumption and other Resources via Abstract Interpretation*. Ms. Thesis, Technical University of Madrid, ETSI Informatica, E-28660, Boadilla del Monte, Madrid, Spain, 88 pages, July 2015.
10. Nataliia Stulova. *Dynamic Checking of Assertions for Higher-order Predicates*. Ms. Thesis, Technical University of Madrid, School of Computer Science, E-28660, Boadilla del Monte, Madrid, Spain, 73 pages, July 2013.
11. P. Chico de Guzmán. *Advanced Evaluation Strategies for Tabling and Parallelism in Logic Programs*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informática UPM, 28660-Boadilla del Monte, Madrid-Spain, November 2012.
12. E. Mera. *A Unified Framework for Resource and Execution Time Analysis, Run-Time Checking and Unit-Testing*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informática UPM, 28660-Boadilla del Monte, Madrid-Spain, November 2010.
13. J.F. Morales. *Advanced Compilation Techniques for Logic Programming*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informática UPM, 28660-Boadilla del Monte, Madrid-Spain, July 2010.
14. E. Albert, S. Genaim. *Proceedings of the Workshop on Bytecode Semantics, Verification, Analysis and Transformation*. Electronic Notes in Theoretical Computer Science, Vol. 253, Num. 5, pages 1–2, Elsevier - North Holland, March 2009.
15. A. Casas. *Automatic Unrestricted Independent And-Parallelism in Declarative Multiparadigm Languages*. Ph.D. Thesis, University of New Mexico (UNM), Electrical and Computer Engineering Department, University of New Mexico, Albuquerque, NM 87131-0001 (USA), September 2008.
16. D. Cabeza. *An Extensible, Global Analysis Friendly Logic Programming System*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informática UPM, 28660-Boadilla del Monte, Madrid-Spain, August 2004.

Invited Papers and Tutorials:

1. M.V. Hermenegildo. *50-Years of Prolog and Beyond (invited talk)*. November 2022. Keynote given at the Prolog 50th Anniversary ‘Prolog Day Symposium’.
2. M.V. Hermenegildo. *Some reflections on Prolog’s evolution, status, and future on the 50th anniversary of the birth of Prolog (abstract of invited talk)*. 38th International Conference on Logic Programming (ICLP’22 at FLoC’22), August 2022.
3. M.V. Hermenegildo, I. Garcia-Contreras, J. Morales, P. Lopez-Garcia, M. Klemen, I. Casso. *Multivariant Assertion-based Guidance of Top-down Horn Clause-based Analysis in CiaoPP*. Workshop on Declarative Program Analysis (DPA 2019), 1 pages, July 2019. (Abstract of invited talk). Associated to FCRC 2019.
4. M.V. Hermenegildo, M. Carro, P. Lopez-Garcia, J.F. Morales, J. Arias, I. Garcia-Contreras, M. Klemen, N. Stulova. *25 Years of Ciao (abstract of invited tutorial)*. Pre-proceedings of the 28th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR’18), September 2018. Talk slides at https://cliplab.org/papers/ciao_tut_lopstr18.pdf.
5. M.V. Hermenegildo, P. Lopez-Garcia, J. Morales, I. Garcia-Contreras, M. Klemen, N. Stulova. *Horn Clause-based Program Analysis and Verification with CiaoPP*. 1st International Workshop on Declarative Program Analysis (DPA 2018), 1 pages, July 2018. (Abstract of invited talk). Associated to ECOOP/ISSTA 2018.
6. M.V. Hermenegildo, P. Lopez-Garcia, U. Liqat, M. Klemen. *Energy Consumption Analysis and Verification by Transformation into Horn Clauses and Abstract Interpretation*. 5th International Workshop on Verification and Program Transformation (VPT 2017), Vol. 253, pages 4–6, EPTCS, April 2017. (Abstract of invited talk).
7. The Ciao Development Team. *The Ciao Multiparadigm Language and Program Development Environment*. 6 pages, November 2006. The ALP Newsletter 19(3). The Association for Logic Programming..
8. F. Bueno, D. Cabeza, M. Carro, J. Correias, J. Gómez, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla, C. Vaucheret. *Agent Programming in Ciao Prolog*. 10 th. Portuguese Conference on Artificial Intelligence (EPIA), LNAI, Num. 2258, 2 pages, Springer-Verlag, December 2001.
9. M.V. Hermenegildo, F. Bueno, G. Puebla, P. Lopez-Garcia. *Program Analysis, Debugging and Optimization Using the Ciao System Preprocessor*. 1999 Int’l. Conference on Logic Programming, pages 52–66, MIT Press, November 1999.
10. M.V. Hermenegildo, The CLIP Group. *Programming with Global Analysis*. Proceedings of ILPS’97, pages 49–52, MIT Press, October 1997. (abstract of invited talk).

Articles in Books and Other Collections:

1. Gopal Gupta, Elmer Salazar, Joaquín Arias, Kinjal Basu, S Varanasi, M Carro. *Prolog: Past, Present, and Future*. Prolog - The Next 50 Years, LNCS, Num. 13900, Springer, July 2023.
2. M.V. Hermenegildo, J.F. Morales, P. Lopez-Garcia, M. Carro. *Types, modes and so much more – the Prolog way*. Prolog - The Next 50 Years, LNCS, Num. 13900, pages 23–37, Springer, July 2023.

3. P. Lopez-Garcia, M.V. Hermenegildo, M. Klemen, U. Liqat. *Energy Consumption Analysis and Verification using CiaoPP*. The ALP Newsletter, Vol. 30, Num. 3, The Association for Logic Programming, September 2017.
4. K. Georgiou, U. Liqat. *Towards LLVM-Based Energy Consumption Analysis of Programs*. ICT-Energy (Nanoenergy) Letters, Num. 8, pages 16–17, July 2014.
5. M. Carro, M.V. Hermenegildo. *Logic Languages*. Encyclopedia of Parallel Computing, pages 1057–1068, Springer, 2011.
6. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, J.F. Morales, G. Puebla. *An Overview of The Ciao Multiparadigm Language and Program Development Environment and its Design Philosophy*. Festschrift for Ugo Montanari, LNCS, Vol. 5065, pages 209–237, Springer-Verlag, June 2008.
7. R. Bagnara, M. Carro. *Foreign Language Interfaces for Prolog: a Terse Survey*. The ALP Newsletter, Vol. 15, Num. 2, The Association for Logic Programming, May 2002. Available from <https://dtai.cs.kuleuven.be/projects/ALP/newsletter/may02/index.html>.
8. G. Puebla, F. Bueno, M.V. Hermenegildo. *A Generic Preprocessor for Program Validation and Debugging*. Analysis and Visualization Tools for Constraint Programming, LNCS, Num. 1870, pages 63–107, Springer-Verlag, September 2000.
9. G. Puebla, F. Bueno, M.V. Hermenegildo. *An Assertion Language for Constraint Logic Programs*. Analysis and Visualization Tools for Constraint Programming, LNCS, Num. 1870, pages 23–61, Springer-Verlag, September 2000.
10. M.V. Hermenegildo, G. Puebla, F. Bueno. *Using Global Analysis, Partial Specifications, and an Extensible Assertion Language for Program Validation and Debugging*. The Logic Programming Paradigm: a 25–Year Perspective, pages 161–192, Springer-Verlag, July 1999.
11. M.V. Hermenegildo, F. Bueno, D. Cabeza, M. Carro, M. García de la Banda, P. Lopez-Garcia, G. Puebla. *The CIAO Multi-Dialect Compiler and System: An Experimentation Workbench for Future (C)LP Systems*. Parallelism and Implementation of Logic and Constraint Logic Programming, pages 65–85, Nova Science, April 1999.

Publications in Refereed Workshops:

1. Manuel V. Hermenegildo, José F. Morales, Pedro Lopez-Garcia. *Teaching Pure LP with Prolog and a Fair Search Rule*. Proceedings of the 40th ICLP Workshops, Vol. 3799, CEUR-WS.org, October 2024.
2. G. Garcia-Pradales, J.F. Morales, M.V. Hermenegildo, J. Arias, M. Carro. *An s(CASP) In-Browser Playground based on Ciao Prolog*. Proceedings of the 38th ICLP Workshops - Goal-directed Execution of Answer Set Programs, Vol. 3193, CEUR-WS.org, August 2022.
3. M. A. Sanchez-Ordaz, I. Garcia-Contreras, V. Perez-Carrasco, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *VeriFly: On-the-fly Assertion Checking with CiaoPP*. 6th Workshop on Formal Integrated Development Environment (F-IDE 2021, part of NASA NFM’21), Electronic Proceedings in Theoretical Computer Science (EPTCS), pages 1–5, Open Publishing Association (OPA), May 2021. Co-located with ETAPS 2021.
4. I. Garcia-Contreras, J. F. Morales, M.V. Hermenegildo. *Incremental and Modular Context-sensitive Analysis*. Workshop on Horn Clauses for Verification and Synthesis (HCVS 2021), March 2021. (Talk).
5. Joaquín Arias, Gopal Gupta, Manuel Carro. *A Short Tutorial on s(CASP), a Goal-directed Execution of Constraint Answer Set Programs*. Proceedings of the 37th ICLP 2021 Workshops, Vol. 2970, CEUR-WS.org, 2021.

6. I. Casso, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *Testing Your (Static Analysis) Truths*. Pre-proceedings of the 30th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'20), September 2020.
7. I. Casso, J. F. Morales, P. Lopez-Garcia, R. Giacobazzi, M.V. Hermenegildo. *Computing Abstract Distances in Logic Programs*. Pre-proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), November 2019.
8. I. Casso, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *An Integrated Approach to Assertion-Based Random Testing in Prolog*. Pre-proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), November 2019.
9. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Incremental Analysis of Logic Programs with Assertions and Open Predicates*. Pre-proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), October 2019.
10. J. Arias, Z. Chen, M. Carro, G. Gupta. *Modeling and Reasoning in Event Calculus Using Goal-Directed Constraint Answer Set Programming*. Pre-Proc. of the 29th Int'l. Symposium on Logic-based Program Synthesis and Transformation , September 2019.
11. I. Casso, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *Towards Computing Abstract Distances in Logic Programs*. Technical Communications of the 35th International Conference on Logic Programming (ICLP 2019), Electronic Proceedings in Theoretical Computer Science (EPTCS), pages 65–66, Open Publishing Association (OPA), September 2019. (Extended Abstract).
12. Joaquín Arias, Manuel Carro, Zhuo Chen, Gopal Gupta. *Constraint Answer Set Programming without Grounding and its Applications*. 3rd Int'l. Workshop on the Resurgence of Datalog in Academia and Industry (Datalog 2.0), Vol. 2368, pages 22–26, CEUR-WS, June 2019.
13. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Multivariant Assertion-based Guidance in Abstract Interpretation*. Pre-proceedings of the 28th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'18), September 2018.
14. P. Lopez-Garcia, M. Klemen, U. Liqat, M.V. Hermenegildo. *A General Framework for Static Profiling of Parametric Resource Usage (extended abstract)*. 19th International Workshop on Logic and Computational Complexity (LCC 2018), 4 pages, July 2018. Associated to FLOC 2018.
15. M. Klemen, N. Stulova, P. Lopez-Garcia, J. F. Morales, M.V. Hermenegildo. *Towards Static Performance Guarantees for Programs with Run-time Checks*. Technical Communications of the 34th International Conference on Logic Programming (ICLP 2018), OpenAccess Series in Informatics (OASICs), 2 pages, July 2018. (Extended Abstract).
16. U. Liqat, Z. Banković, P. Lopez-Garcia, M.V. Hermenegildo. *Inferring Energy Bounds via Static Program Analysis and Evolutionary Modeling of Basic Blocks*. Pre-proceedings of the 27th International Symposium on Logic-Based Program Synthesis and Transformation (LOPSTR'17), October 2017. arXiv:1601.02800.
17. Salvador Tamarit, Julio Mariño, Guillermo Viguera, Manuel Carro. *Towards a Semantics-Aware Code Transformation Toolchain for Heterogeneous Systems*. Proceedings of XIV Jornadas sobre Programación y Lenguajes (PROLE 2016), EPTCS, September 2017.
18. Guillermo Viguera, Manuel Carro, Salvador Tamarit, Julio Mariño. *Towards Automatic Learning of Heuristics for Mechanical Transformations of Procedural Code*. Proceedings of XIV Jornadas sobre Programación y Lenguajes (PROLE 2016), EPTCS, September 2017.

19. Nataliia Stulova. *On Improving Run-time Checking in Dynamic Languages*. Technical Communications of the 33rd International Conference on Logic Programming (ICLP 2017), OpenAccess Series in Informatics (OASICs), Vol. 58, pages 1501–1510, Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, 2017. CP/ICLP/SAT Doctoral Program 2017.
20. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Towards Run-time Checks Simplification via Term Hiding*. Technical Communications of the 33rd International Conference on Logic Programming (ICLP 2017), OpenAccess Series in Informatics (OASICs), Vol. 58, pages 91–93, Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, 2017. (Extended Abstract).
21. Jan Kuper, Lutz Schubert, Kilian Kempf, Colin Glas, Daniel Rubio Bonilla, Manuel Carro. *Program Transformations in the POLCA Project*. Design, Automation, and Testing in Europe, EDAA, March 2016.
22. Guillermo Viguera, Manuel Carro, Salvador Tamarit, Julio Mariño. *Towards Automatic Learning of Heuristics for Mechanical Transformations of Procedural Code*. Proceedings of the First International Workshop on Program Transformation for Programmability in Heterogeneous Architectures (PROHA 2016), March 2016.
23. Salvador Tamarit, Julio Mariño, Guillermo Viguera, Manuel Carro. *Towards a Semantics-Aware Transformation Toolchain for Heterogeneous Systems*. Proceedings of the First International Workshop on Program Transformation for Programmability in Heterogeneous Architectures (PROHA 2016), March 2016.
24. U. Liqat, Z. Banković, P. Lopez-Garcia, M.V. Hermenegildo. *Inferring Energy Bounds Statically by Evolutionary Analysis of Basic Blocks*. Workshop on High Performance Energy Efficient Embedded Systems (HIP3ES 2016), 2016. arXiv:1601.02800.
25. R. Haemmerle, M.V. Hermenegildo, M. Klemen, U. Liqat, P. Lopez-Garcia. *Energy Analysis and Verification by Translation to Horn Clauses and Abstract Interpretation*. Workshop on Horn Clauses for Verification and Synthesis (HCVS'2015), July 2015.
26. P. Lopez-Garcia, R. Haemmerlé, M. Klemen, U. Liqat, M.V. Hermenegildo. *Towards Energy Consumption Verification via Static Analysis*. Workshop on High Performance Energy Efficient Embedded Systems (HIP3ES), arXiv:1501.03064, 11 pages, 2015. arXiv:1512.09369.
27. J.F. Morales, M.V. Hermenegildo. *Pre-Indexed Terms for Prolog*. Pre-proceedings of the 24th International Symposium on Logic-Based Program Synthesis and Transformation (LOPSTR'14), 15 pages, September 2014.
28. J.F. Morales, M.V. Hermenegildo. *Towards Pre-Indexed Terms*. 14th International Colloquium on Implementation of Constraint and LOGic Programming Systems (CICLOPS-WLPE 2014), 14 pages, RWTH Aachen University, July 2014. <https://sunsite.informatik.rwth-aachen.de/Publications/AIB/2014>.
29. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Towards Assertion-based Debugging of Higher-Order (C)LP Programs (Extended Abstract)*. Theory and Practice of Logic Programming, 30th Int'l. Conference on Logic Programming (ICLP'14) Special Issue, On-line Supplement, Vol. 14, Num. 4-5, pages 209–210, Cambridge U. Press, July 2014.
30. U. Liqat, S. Kerrison, A. Serrano, K. Georgiou, P. Lopez-Garcia, N. Grech, M.V. Hermenegildo, K. Eder. *Energy Consumption Analysis of Programs based on X MOS ISA-Level Models*. Pre-proceedings of the 23rd International Symposium on Logic-Based Program Synthesis and Transformation (LOPSTR'13), September 2013.
31. A. Serrano, P. Lopez-Garcia, M.V. Hermenegildo. *Towards an Abstract Domain for Resource Analysis of Logic Programs Using Sized Types*. 23rd Workshop on Logic-based Methods in Programming Environments (WLPE 2013), 15 pages, August 2013. CoRR abs/1308.3940.

32. Z. Drey, J.F. Morales, M.V. Hermenegildo. *Reversible Language Extensions and their Application in Debugging*. 12th International Colloquium on Implementation of Constraint and Logic Programming Systems (CICLOPS 2012), 15 pages, September 2012.
33. E.J. Gallego-Arias, R. Haemmerlé, M.V. Hermenegildo, J.F. Morales. *The Ciao CLP(FD) Library: A Modular CLP Extension for Prolog*. 12th International Colloquium on Implementation of Constraint and Logic Programming Systems (CICLOPS 2012), 15 pages, September 2012.
34. J. F. Morales, R. Haemmerlé, M. Carro, M.V. Hermenegildo. *Lightweight compilation of (C)LP to JavaScript*. XII Jornadas sobre Programación y Lenguajes (PROLE), Universidad de Almería, 2012.
35. P. Chico de Guzmán, M. Carro, M.V. Hermenegildo, P. Stuckey. *A General Implementation Framework for Tabled CLP*. XII Jornadas sobre Programación y Lenguajes (PROLE), Universidad de Almería, 2012.
36. P. Lopez-Garcia, L. Darmawan, F. Bueno, M.V. Hermenegildo. *Interval-based Resource Usage Verification: Formalization and Prototype*. 2nd International Workshop on Foundational and Practical Aspects of Resource Analysis (FOPARA'2011), May 2011.
37. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *The Ciao Approach to the Dynamic vs. Static Language Dilemma*. Proceedings for the International Workshop on Scripts to Programs (STOP'11), 4 pages, ACM, 2011.
38. J. Navas, M. Méndez-Lojo, M.V. Hermenegildo. *User-Definable Resource Usage Bounds Analysis for Java Bytecode*. Vol. 253, Num. 5, pages 65–82, Elsevier - North Holland, March 2009.
39. P. Chico de Guzmán, M. Carro, M.V. Hermenegildo. *A Program Transformation for Continuation Call-Based Tabled Execution*. Colloquium on Implementation of Constraint and Logic Programming Systems (ICLP associated workshop), 15 pages, University of Udine, December 2008.
40. G. Marpons, J. Mariño, M. Carro, A. Herranz, L.Å. Fredlund, J.J. Moreno-Navarro, A. Polo. *A Coding Rule Conformance Checker Integrated into GCC*. VIII Jornadas sobre Programación y Lenguajes, PROLE 2008, pages 245–249, October 2008.
41. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Zanardini. *COSTA: A Cost and Termination Analyzer for Java Bytecode*. Proceedings of the Workshop on Bytecode Semantics, Verification, Analysis and Transformation (BYTECODE'08), Electronic Notes in Theoretical Computer Science, Elsevier, April 2008.
42. G. Marpons-Ucero, J. Mariño, A. Herranz, L.Å. Fredlund, M. Carro, J.J. Moreno-Navarro. *Automatic Coding Rule Conformance Checking Using Logic Programs*. 17th Workshop on Logic-based methods in Programming Environments, WLPE 2007, September 2007.
43. M.V. Hermenegildo, The Ciao Development Team. *An Overview of The Ciao Multiparadigm Language and Program Development Environment and its Design Philosophy*. ECOOP Workshop on Multiparadigm Programming with Object-Oriented Languages MPOOL 2007, July 2007.
44. A. Casas, D. Cabeza, M.V. Hermenegildo. *Functional Notation and Lazy Evaluation in Ciao*. Colloquium on Implementation of Constraint and Logic Programming Systems (CICLOPS'05, ICLP associated workshop), pages 25–36, October 2005.

45. J. Correas, J. M. Gomez, M. Carro, D. Cabeza, M.V. Hermenegildo. *A Generic Persistence Model for CLP Systems (And Two Useful Implementations)*. Second CoLogNet Workshop on Implementation Technology for Computational Logic Systems (Formal Methods '03 Workshop), pages 51–64, Facultad de Informatica, September 2003.
46. J. Correas, F. Bueno. *A Configuration Framework for Distributed Logic Applications*. Proc. of the AGP'2002 Joint Conference on Declarative Programming, pages 123–137, Facultad de Informatica, September 2002.
47. M. Carro, M.V. Hermenegildo. *A Simple Approach to Distributed Objects in Prolog*. Colloquium on Implementation of Constraint and LOGic Programming Systems (ICLP associated workshop), July 2002.
48. A. Pineda, F. Bueno. *The O'Ciao Approach to Object Oriented Logic Programming*. Colloquium on Implementation of Constraint and LOGic Programming Systems (ICLP associated workshop), July 2002.
49. C. Vaucheret, S. Guadarrama, S. Muñoz. *Fuzzy Prolog: A Simple Implementation using CLP(R)*. Constraints and Uncertainty, A CP2001 workshop, LNCS, Springer-Verlag, December 2001.
50. J. Correas, F. Bueno. *A Configuration Framework to Develop and Deploy Distributed Logic Applications*. ICLP01 Colloquium on Implementation of Constraint and LOGic Programming Systems, 15 pages, November 2001.
51. S. Muñoz, J.J. Moreno-Navarro, M.V. Hermenegildo. *Efficient Implementation of General Negation Using Abstract Interpretation*. Proc. of the AGP'2000 Joint Conference on Declarative Programming, 15 pages, Italian Association for Logic Programming, December 2000.
52. D. Cabeza, M.V. Hermenegildo. *The Ciao Module System: A New Module System for Prolog*. Special Issue on Parallelism and Implementation of (C)LP Systems, Electronic Notes in Theoretical Computer Science, Vol. 30, Num. 3, Elsevier - North Holland, March 2000.
53. M.V. Hermenegildo. *A System for Automatically Generating Documentation for (C)LP Programs*. Special Issue on Parallelism and Implementation of (C)LP Systems, Electronic Notes in Theoretical Computer Science, Vol. 30, Num. 4, March 2000.
54. I. de Castro Dutra, V. Santos Costa, G. Gupta, E. Pontelli, M. Carro, P. Kacsuk (editors). *Parallelism and Implementation Technology for (Constraint) Logic Programming*. Electronic Notes in Theoretical Computer Science, Vol. 30, Num. 2, Elsevier - North Holland, March 2000.
55. D. Cabeza, M.V. Hermenegildo. *A New Module System for Prolog*. ICLP'99 WS on Parallelism and Implementation of (C)LP Systems, pages 110–128, N.M. State U., December 1999.
56. M.V. Hermenegildo. *A Documentation Generator for Logic Programming Systems*. ICLP'99 Workshop on Logic Programming Environments, pages 80–97, N.M. State University, December 1999.
57. G. Puebla, F. Bueno, M.V. Hermenegildo. *An Assertion Language for Debugging of Constraint Logic Programs*. Proceedings of the ILPS'97 Workshop on Tools and Environments for (Constraint) Logic Programming, October 1997. Available from ftp://cliplab.org/pub/papers/assert_lang_tr_discipldeliv.ps.gz as technical report CLIP2/97.1..

58. M.V. Hermenegildo, F. Bueno, D. Cabeza, M. Carro, M. García de la Banda, P. Lopez-Garcia, G. Puebla. *The CIAO Multi-Dialect Compiler and System: A Demo and Status Report*. Proceedings of the JICSLP'96 Workshop on Parallelism and Implementation Technology, 12 pages, Computer Science Department, Technical University of Madrid, September 1996. Available from <https://www.cliplab.org/Projects/COMPULOG/meeting96/papers/PS/clip.ps.gz>.
59. M.V. Hermenegildo, F. Bueno, D. Cabeza, M. Carro, M. García de la Banda, P. Lopez-Garcia, G. Puebla. *The CIAO Multi-Dialect Compiler and System: An Experimentation Workbench for Future (C)LP Systems*. Proc. of the AGP'96 Joint Conference on Declarative Programming, pages 105–108, U. of the Basque Country, July 1996. Available from <ftp://www.cliplab.org/pub/papers>.
60. M.V. Hermenegildo, F. Bueno, M. García de la Banda, G. Puebla. *The CIAO Multi-Dialect Compiler and System: An Experimentation Workbench for Future (C)LP Systems*. Proceedings of the ILPS'95 Workshop on Visions for the Future of Logic Programming, December 1995. Available from <https://www.cliplab.org/>.
61. M.V. Hermenegildo, The CLIP Group. *The CIAO Multiparadigm Compiler and System: A Progress Report*. Proc. of the Compulog Net Area Workshop on Parallelism and Implementation Technologies, Technical University of Madrid, September 1995.
62. M.V. Hermenegildo, The CLIP Group. *Some Methodological Issues in the Design of CIAO - A Generic, Parallel Concurrent Constraint System*. Proc. of the 1994 ICOT/NSF Workshop on Parallel and Concurrent Programming, U. of Oregon, March 1994.
63. M.V. Hermenegildo, The CLIP Group. *Towards CIAO-Prolog - A Parallel Concurrent Constraint System*. Proc. of the Compulog Net Area Workshop on Parallelism and Implementation Technologies, 10 pages, FIM/UPM, Madrid, Spain, June 1993.

Technical Reports and Manuals:

1. Daniela Ferreiro, Ignacio Casso, Pedro Lopez-Garcia, José F. Morales, Manuel V. Hermenegildo. *Checkification: A Practical Approach for Testing Static Analysis Truths*. Num. CLIP-1/2025.0, IMDEA Software Institute and Technical University of Madrid (UPM), January 2025. arXiv 2501.12093.
2. F. Ridoux. *Improvements to the Auxiliary Analyses for Cost Analysis*. CLIP Lab, IMDEA Software Institute, August 2024. Master internship report. Supervised by P. Lopez-Garcia, M.V. Hermenegildo, J. F. Morales and L. Rustenholz..
3. L. Rustenholz. *Automated Approximate Recurrence Solving applied to Static Analysis of Energy Consumption*. CLIP Lab, IMDEA Software Institute, August 2022. Master internship report. Supervised by M.V. Hermenegildo, P. Lopez-Garcia, and J. F. Morales.
4. M.A. Sanchez-Ordaz, I. Garcia-Contreras, V. Perez-Carrasco, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *VeriFly: On-the-fly Assertion Checking via Incrementality*. Num. CLIP-1/2021.0, 21 pages, The CLIP Lab, IMDEA Software Institute and T.U. Madrid, May 2021.
5. G. Garcia-Pradales, J.F. Morales, M.V. Hermenegildo. *The Ciao Prolog Playground*. Technical University of Madrid (UPM) and IMDEA Software Institute, 2021.
6. I. Casso, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *Computing Abstract Distances in Logic Programs*. Num. CLIP-2/2019.0, 21 pages, The CLIP Lab, IMDEA Software Institute and T.U. Madrid, July 2019.

7. M. Klemen, N. Stulova, P. Lopez-Garcia, J. F. Morales, M.V. Hermenegildo. *An Approach to Static Performance Guarantees for Programs with Run-time Checks*. Num. CLIP-1/2018.0, 15 pages, The CLIP Lab, IMDEA Software Institute and T.U. Madrid, April 2018.
8. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Term Hiding and its Impact on Run-time Check Simplification*. Num. CLIP-1/2017.0, 27 pages, The CLIP Lab, May 2017. CoRR abs/1705.06662 (v2) [cs.PL].
9. P. Lopez-Garcia, R. Haemmerlé, U. Liqat, M. Klemen, M.V. Hermenegildo. *Parametric Static Profiling*. Num. CLIP-2/2015.0, The CLIP Lab, April 2015.
10. Guillermo Viguera, Salvador Tamarit, Manuel Carro, Julio Mariño. *Towards a Rule-Based Approach to Generate High-Performance Scientific Code*. Num. CLIP1/2015.0, 8 pages, The CLIP Lab, March 2015. <https://cliplab.org/papers/viguera15-rule-based.pdf>.
11. R. Haemmerlé. *On the Confluence of the Analytical Semantics of CHR*. Num. CLIP2/2014.0, 12 pages, Technical University of Madrid (UPM), July 2014.
12. N. Stulova, J. F. Morales, M.V. Hermenegildo. *An Approach to Assertion-based Debugging of Higher-Order (C)LP Programs*. Num. CLIP-1/2014.0, 25 pages, The CLIP Lab, January 2014. CoRR abs/1404.4246 [cs.PL].
13. R. Haemmerlé. *Toward Observational Equivalences for Linear Logic Concurrent Constraint Languages*. Num. CLIP5/2011.0, 32 pages, Technical University of Madrid (UPM), May 2011.
14. R. Haemmerlé. *Towards a Logically Complete Fixpoint Semantics for Constraint Handling Rules*. Num. CLIP3/2011.0, 31 pages, Technical University of Madrid (UPM), March 2011.
15. P. Chico de Guzmán, A. Casas, M. Carro, M.V. Hermenegildo. *A Simulation Study on Parallel Backtracking with Solution Memoing for Independent And-Parallelism*. Num. CLIP1/2011.0, 12 pages, Technical University of Madrid (UPM), January 2011.
16. J.F. Morales, M.V. Hermenegildo, R. Haemmerlé. *Towards Modular Extensions for a Modular Language*. Num. CLIP2/2011.0, 15 pages, Technical University of Madrid (UPM), January 2011.
17. E. Mera, T. Trigo, P. Lopez-Garcia, M.V. Hermenegildo. *An Approach to Profiling for Run-Time Checking of Computational Properties and Performance Debugging*. Num. CLIP3/2010.0, 29 pages, Technical University of Madrid (UPM), March 2010.
18. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *An Overview of Ciao and its Design Philosophy*. Num. CLIP2/2010.0, Technical University of Madrid (UPM), March 2010. Under consideration for publication in *Theory and Practice of Logic Programming (TPLP)*.
19. J.F. Morales, M. Carro, M.V. Hermenegildo. *Description and Optimization of Abstract Machines in a Dialect of Prolog*. Num. CLIP4/2009.0, Technical University of Madrid (UPM), October 2009.
20. E. Mera, P. Lopez-Garcia, M.V. Hermenegildo. *Towards Integrating Run-Time Checking and Software Testing in a Verification Framework*. Num. CLIP1/2009.0, 19 pages, Technical University of Madrid (UPM), March 2009.
21. P. Chico de Guzmán, M. Carro, M.V. Hermenegildo. *Bridge Program Transformation for the CCall Tabling Scheme*. Num. CLIP6/2008.0, Technical University of Madrid (UPM), September 2008.

22. A. Casas, M. Carro, M.V. Hermenegildo. *A High-Level Implementation of Non-Deterministic, Unrestricted, Independent And-Parallelism*. Num. TR-CS-2008-10, University of New Mexico (UNM), September 2008.
23. M.V. Hermenegildo, E. Albert, P. Arenas, F. Bueno, M. Carro, A. Casas, P. Chico de Guzmán, J. Correas, S. Genaim, J. Lipton, Pedro Lopez-Garcia, M. Méndez, E. Mera, J. Morales, J. Navas, R. Padilla, P. Pietrzak, G. Puebla, M. Zamalloa, D. Zanardini. *Rigorous Methods for Mobile and Heterogeneous Software Systems – Second Year Report*. Num. CLIP3/2008.0, Technical University of Madrid (UPM), April 2008.
24. A. Casas, M. Carro, M.V. Hermenegildo. *Automatic Unrestricted Independent And-Parallelism in Logic Programs*. Num. CLIP11/2007.0, Technical University of Madrid (UPM), December 2007. Under consideration for publication in *Theory and Practice of Logic Programming (TPLP)*.
25. A. Casas, M. Carro, M.V. Hermenegildo. *Towards a High-Level Implementation of Execution Primitives for Non-restricted, Independent And-parallelism*. Num. TR-CS-2007-16, University of New Mexico (UNM), October 2007.
26. A. Casas, M. Carro, M.V. Hermenegildo. *Annotation Algorithms for Unrestricted Independent And-Parallelism in Logic Programs*. Num. TR-CS-2007-14, University of New Mexico (UNM), September 2007.
27. G. Marpons, J. Mariño, M. Carro, A. Herranz, J.J. Moreno-Navarro, L.Å. Fredlund. *Automatic Coding Rule Conformance Checking Using Logic Programming*. Num. CLIP6/2007.0, Technical University of Madrid (UPM), August 2007.
28. P. Chico de Guzmán, M. Carro, M.V. Hermenegildo. *An Improved Continuation Call-Based Implementation of Tabling*. Num. CLIP9/2007.0, Technical University of Madrid (UPM), August 2007.
29. A. Casas, M. Carro, M.V. Hermenegildo. *Towards a High-Level Implementation of Execution Primitives for Non-Restricted, Independent And-Parallelism*. Num. CLIP7/2007.0, Technical University of Madrid (UPM), August 2007.
30. A. Casas, M. Carro, M.V. Hermenegildo. *Annotation Algorithms for Unrestricted Independent And-Parallelism in Logic Programs*. Num. CLIP5/2007.0, Technical University of Madrid (UPM), June 2007.
31. M.V. Hermenegildo, E. Albert, P. Arenas, A. Beascoa, F. Bueno, D. Cabeza, M. Carro, J. Correas, A. García Pañoso, J. Lipton, P. Lopez-Garcia, E. Mera, J. Morales, C. Ochoa, G. Puebla. *Rigorous Methods for Mobile and Heterogeneous Software Systems – First Year Report*. Num. CLIP4/2007.0, Technical University of Madrid (UPM), March 2007.
32. J. Morales, M. Carro, M.V. Hermenegildo. *Description and Optimization of Abstract Machines in an Extension of Prolog*. Num. CLIP8/2006.0, 43 pages, Technical University of Madrid (UPM), December 2006.
33. M.V. Hermenegildo, The Ciao Development Team. *Why Ciao? –An Overview of the Ciao System’s Design Philosophy*. Num. CLIP7/2006.0, 6 pages, Technical University of Madrid (UPM), December 2006. Available from: <https://cliplab.org/papers/ciao-philosophy-note-tr.pdf>.
34. M. Carro, J. Morales, H.L. Muller, G. Puebla, M.V. Hermenegildo. *Optimizing Prolog for Small Devices: A Case Study*. Num. CLIP4/2006.0, 16 pages, Technical University of Madrid, April 2006. Under consideration for publication.

35. A. Casas, D. Cabeza, M.V. Hermenegildo. *A Syntactic Approach to Combining Functional Notation, Lazy Evaluation and Higher-Order in LP Systems*. Num. TR-CS-2006-07, 17 pages, University of New Mexico (UNM), 2006.
36. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla (Eds.). *The Ciao System. Reference Manual (V1.10)*. School of Computer Science, Technical University of Madrid (UPM), June 2004. System and on-line version of the manual available at <https://ciao-lang.org>.
37. J. Correas, J. M. Gomez, M. Carro, D. Cabeza, M.V. Hermenegildo. *A Generic Persistence Model for (C)LP Systems (and two useful implementations)*. Num. CLIP3/2003.1(2004), 16 pages, Technical University of Madrid, April 2004. <https://cliplab.org/papers/persdb-tr1.pdf>.
38. Pattengale, N. D.. *Transactional Semantics*. Num. CLIP3/04.0, 24 pages, Technical University of Madrid (UPM), February 2004.
39. J. Correas, J. M. Gomez, M. Carro, D. Cabeza, M.V. Hermenegildo. *A Generic Model for Persistence in CLP Systems*. Num. CLIP3/2003.0, 17 pages, Technical University of Madrid, August 2003. <https://cliplab.org/papers/persdb-tr.pdf>.
40. David Trallero Mena. *Local and Global Multiattributed Variables*. Num. CLIP10/03.0, Facultad de Informática, UPM, Technical University of Madrid (UPM), 2003.
41. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.8)*. Num. CLIP4/2002.1, School of Computer Science, Technical University of Madrid (UPM), May 2002. System and on-line version of the manual available at <https://ciao-lang.org>.
42. F. Bueno, J. Correas. *Active Module Service*. Num. CLIP4/2001.1, Facultad de Informática, UPM, Technical University of Madrid (UPM), 2001.
43. M. Carro, M.V. Hermenegildo. *Remote Execution and Mobile Objects in Ciao Prolog*. Num. CLIP3/2001.1, Facultad de Informática, UPM, Technical University of Madrid (UPM), 2001.
44. F. Bueno, M.V. Hermenegildo, G. Puebla, P. J. Stuckey. *Safety for Logic Programs*. Num. CLIP1/2001.1, Facultad de Informática, UPM, Technical University of Madrid (UPM), 2001.
45. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.6)*. Num. CLIP5/2000.1, School of Computer Science, Technical University of Madrid (UPM), July 2000. System and on-line version of the manual available at <https://ciao-lang.org>.
46. J. Correas. *A Low-Level Bidirectional Prolog / Java Interface: Design and Prolog API*. Num. CLIP1/2000.1, 50 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), 2000.
47. J. Correas. *A Low-Level Bidirectional Prolog / Java Interface: Java API*. Num. CLIP2/2000.1, 80 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), 2000.
48. J. Correas. *An Object Oriented Bidirectional Prolog to Java Interface*. Num. CLIP3/2000.1, 30 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), 2000.
49. D. Cabeza, M.V. Hermenegildo. *Higher-order Logic Programming in Ciao*. Num. CLIP7/99.0, 15 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), September 1999.
50. D. Cabeza, M.V. Hermenegildo. *A New Module System for Prolog*. Num. CLIP8/99.0, 15 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), September 1999.

51. M.V. Hermenegildo. *A Documentation Generator for Logic Programming Systems*. Num. CLIP10/99.0, 15 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), September 1999.
52. A. Pineda. *Object Oriented Programming Library (O'Ciao)*. Num. CLIP 6/99.0, Facultad de Informática, UPM, July 1999.
53. A. Pineda, M.V. Hermenegildo. *O'Ciao: An Object Oriented Programming Model for (CIAO) Prolog*. Num. CLIP 5/99.0, Facultad de Informática, UPM, July 1999.
54. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.0)*. Num. CLIP11/99.1, School of Computer Science, Technical University of Madrid (UPM), June 1999. System and on-line version of the manual available at <https://ciao-lang.org>.
55. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V0.6)*. Num. CLIP12/98.1, School of Computer Science, Technical University of Madrid (UPM), July 1998. System and on-line version of the manual available at <https://ciao-lang.org>.
56. F. Bueno. *Using Assertions for Static Debugging of CLP: A Manual*. Num. CLIP1/98.0, 15 pages, DISCIPL Project/CLIP Group, UPM, June 1998.
57. The CLIP Group. *Program Assertions*. Num. CLIP4/97.1, Facultad de Informática, UPM, August 1997.
58. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual*. Num. CLIP3/97.1, School of Computer Science, Technical University of Madrid (UPM), August 1997. System and on-line version of the manual available at <https://ciao-lang.org>.
59. F. Bueno. *The CIAO Multiparadigm Compiler: A User's Manual*. Num. CLIP8/95.0, Facultad de Informática, UPM, June 1995.
60. F. Bueno, D. Cabeza, M.V. Hermenegildo, S. Prestwich, G. Puebla. *Some Improvements to an Abstract Syntax for Analysis and Optimization of Full (Parallel) Prolog*. Num. CLIP 8/94.0, Computer Science Dept., Technical U. of Madrid (UPM), September 1994.
61. F. Bueno, M. Carro, D. Cabeza, F. Ballesteros, P. Lopez-Garcia, M. García de la Banda, M.V. Hermenegildo, L. Gómez, S. Prestwich, S.-W. Yan. *A Proposal for an Interchange Abstract Syntax for (Parallel) Prolog*. Num. CLIP3/93.0, 33 pages, Computer Science Dept., Technical U. of Madrid (UPM), June 1993.

13 Publications in Concurrency, Dynamic Scheduling, and Concurrent Languages

Articles in Refereed Journals:

1. Agostino Dovier, Andrea Formisano, Gopal Gupta, Manuel V. Hermenegildo, Enrico Pontelli, Ricardo Rocha. *Parallel Logic Programming: A Sequel*. Theory and Practice of Logic Programming, 20th Anniversary Special Issue, Vol. 22, Num. 6, pages 905–973, Cambridge U. Press, March 2022.
2. M. García de la Banda, M.V. Hermenegildo, K. Marriott. *Independence in CLP Languages*. ACM Transactions on Programming Languages and Systems, Vol. 22, Num. 2, pages 269–339, ACM Press, March 2000.
3. F. Bueno, M.V. Hermenegildo, U. Montanari, F. Rossi. *Partial Order and Contextual Net Semantics for Atomic and Locally Atomic CC Programs*. Science of Computer Programming, Vol. 30, pages 51–82, North-Holland, January 1998. Special CCP95 Workshop issue.

Articles in Refereed Conferences:

1. M. Carro, M.V. Hermenegildo. *Concurrency in Prolog Using Threads and a Shared Database*. 1999 International Conference on Logic Programming, pages 320–334, MIT Press, Cambridge, MA, USA, November 1999.
2. G. Puebla, M. García de la Banda, K. Marriott, P. Stuckey. *Optimization of Logic Programs with Dynamic Scheduling*. 1997 International Conference on Logic Programming, pages 93–107, MIT Press, June 1997.
3. M. García de la Banda, M.V. Hermenegildo, K. Marriott. *Independence in Dynamically Scheduled Logic Languages*. 1996 International Conference on Algebraic and Logic Programming, LNCS, Num. 1139, pages 47–61, Springer-Verlag, September 1996.
4. G. Puebla, M.V. Hermenegildo. *Automatic Optimization of Dynamic Scheduling in Logic Programs*. Programming Languages: Implementation, Logics, and Programs, LNCS, Num. 1140, pages 475–476, Springer-Verlag, September 1996. Poster abstract.
5. M. García de la Banda, K. Marriott, P. Stuckey. *Efficient Analysis of Constraint Logic Programs with Dynamic Scheduling*. 1995 International Logic Programming Symposium, pages 417–431, MIT Press, Cambridge, MA, December 1995.
6. M.V. Hermenegildo, D. Cabeza, M. Carro. *Using Attributed Variables in the Implementation of Concurrent and Parallel Logic Programming Systems*. Proc. of the Twelfth International Conference on Logic Programming, pages 631–645, MIT Press, June 1995.
7. F. Bueno, M.V. Hermenegildo, U. Montanari, F. Rossi. *From Eventual to Atomic and Locally Atomic CC Programs: A Concurrent Semantics*. Fourth International Conference on Algebraic and Logic Programming, LNCS, Num. 850, pages 114–132, Springer-Verlag, September 1994.
8. U. Montanari, F. Rossi, F. Bueno, M. García de la Banda, M.V. Hermenegildo. *Towards a Concurrent Semantics-based Analysis of CC and CLP*. Principles and Practice of Constraint Programming, LNCS, Num. 874, pages 151–161, Springer-Verlag, May 1994.
9. K. Marriott, M. García de la Banda, M.V. Hermenegildo. *Analyzing Logic Programs with Dynamic Scheduling*. 20th. Annual ACM Conf. on Principles of Programming Languages, pages 240–254, ACM, January 1994.

10. M. García de la Banda, M.V. Hermenegildo, K. Marriott. *Independence in Constraint Logic Programs*. 1993 International Logic Programming Symposium, pages 130–146, MIT Press, Cambridge, MA, October 1993.
11. F. Bueno, M.V. Hermenegildo. *An Automatic Translation Scheme from Prolog to the Andorra Kernel Language*. Proc. of the 1992 International Conference on Fifth Generation Computer Systems, Vol. 2, pages 759–769, Institute for New Generation Computer Technology (ICOT), June 1992.

Books and Monographs:

1. M. García de la Banda. *Independence, Global Analysis, and Parallelism in Dynamically Scheduled Constraint Logic Programming*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informatica UPM, 28660-Boadilla del Monte, Madrid-Spain, September 1994.
2. F. Bueno Carrillo. *Traducción Automática de Prolog al Andorra Kernel Language (Automatic Translation from Prolog to the Andorra Kernel Language)*. Ms. Thesis, T.U. of Madrid (UPM), Facultad de Informática, Madrid, 28660, December 1991.

Publications in Refereed Workshops:

1. G. Puebla, M. García de la Banda, M.V. Hermenegildo, K. Marriott, P. Stuckey. *Automatic Optimization of Logic Programs with Dynamic Scheduling*. Workshop on Abstract Interpretation of Logic Languages, The Hebrew University, December 1996.
2. D. Cabeza, M.V. Hermenegildo. *Implementing Distributed Concurrent Constraint Execution in the CIAO System*. Proc. of the AGP'96 Joint conference on Declarative Programming, pages 67–78, U. of the Basque Country, July 1996. Available from <https://www.cliplab.org/>.
3. D. Cabeza, M.V. Hermenegildo. *Distributed Concurrent Constraint Execution in the CIAO System*. Proc. of the 1995 COMPULOG-NET Workshop on Parallelism and Implementation Technologies, U. Utrecht / T.U. Madrid, September 1995. Available from <https://www.cliplab.org/>.
4. F. Bueno, M.V. Hermenegildo. *Analysis of Concurrent Constraint Logic Programs with a Fixed Scheduling Rule*. ICLP95 WS on Abstract Interpretation of Logic Languages, June 1995.
5. M. García de la Banda, K. Marriott, P. Stuckey. *Efficient Analysis of Constraint Logic Programs with Dynamic Scheduling*. ICLP95 WS on Abstract Interpretation of Logic Languages, June 1995.
6. M.V. Hermenegildo, D. Cabeza, M. Carro. *On The Uses of Attributed Variables in Parallel and Concurrent Logic Programming Systems*. Proc. of the 1994 COMPULOG-NET Workshop Parallelism and Implementation Technologies, 15 pages, U. of Madrid, September 1994. Also provided as attachment UPM-1 of deliverable D4.3/2.
7. F. Bueno, M.V. Hermenegildo. *Towards an Automatic Translation Algorithm from Prolog to the Andorra Kernel Language*. Proc. of the 1991 GULP Conference on Logic Programming, pages 489–505, Italian Association for Logic Programming, June 1991.

Technical Reports and Manuals:

1. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla (Eds.). *The Ciao System. Reference Manual (V1.10)*. School of Computer Science, Technical University of Madrid (UPM), June 2004. System and on-line version of the manual available at <https://ciao-lang.org>.
2. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.8)*. Num. CLIP4/2002.1, School of Computer Science, Technical University of Madrid (UPM), May 2002. System and on-line version of the manual available at <https://ciao-lang.org>.
3. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.6)*. Num. CLIP5/2000.1, School of Computer Science, Technical University of Madrid (UPM), July 2000. System and on-line version of the manual available at <https://ciao-lang.org>.
4. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.0)*. Num. CLIP11/99.1, School of Computer Science, Technical University of Madrid (UPM), June 1999. System and on-line version of the manual available at <https://ciao-lang.org>.
5. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V0.6)*. Num. CLIP12/98.1, School of Computer Science, Technical University of Madrid (UPM), July 1998. System and on-line version of the manual available at <https://ciao-lang.org>.
6. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual*. Num. CLIP3/97.1, School of Computer Science, Technical University of Madrid (UPM), August 1997. System and on-line version of the manual available at <https://ciao-lang.org>.
7. G. Puebla, M.V. Hermenegildo. *Automatic Optimization of Dynamic Scheduling in Logic Programs*. Technical University of Madrid, January 1996.
8. G. Puebla, M.V. Hermenegildo. *Specialization and Optimization of Constraint Programs with Dynamic Scheduling*. Num. CLIP12/95.0, Facultad de Informática, UPM, September 1995. Presented at the 1995 COMPULOG Meeting on Program Development.
9. F. Bueno, M.V. Hermenegildo. *Compiling Concurrency into a Sequential Logic Language*. Num. CLIP15/95.0, Facultad de Informática, UPM, June 1995.
10. M. García de la Banda, K. Marriott, P. Stuckey. *Efficient Analysis of Constraint Logic Programs with Dynamic Scheduling*. Facultad de Informática, UPM, March 1995.
11. M. García de la Banda, M.V. Hermenegildo, K. Marriott. *Independence and Search Space Preservation in Dynamically Scheduled Constraint Logic Languages*. Facultad de Informática, UPM, February 1995.
12. F. Bueno, F. Rossi, M.V. Hermenegildo. *Concurrent Semantics Based Optimizations of cc and CLP*. Num. CLIP2/93.2, T.U. of Madrid (UPM), September 1994.
13. M.V. Hermenegildo, D. Cabeza, M. Carro. *On The Uses of Attributed Variables in Parallel and Concurrent Logic Programming Systems*. Num. CLIP 5/94.0, 17 pages, School of Computer Science, Technical University of Madrid (UPM), June 1994. Presented at the ILPS'94 Post Conference Workshop on Design and Implementation of Parallel Logic Programming Systems, Available from <https://www.cliplab.org/>.
14. F. Bueno, M. García de la Banda, M.V. Hermenegildo, U. Montanari, F. Rossi. *From Eventual to Atomic and Locally Atomic CC Programs: A Concurrent Semantics*. Num. CLIP1/94.0, T.U. of Madrid (UPM), January 1994.

15. M. García de la Banda, M.V. Hermenegildo, K. Marriott. *Independence in Logic Programs with Dynamic Scheduling*. U. of Madrid (UPM), 1994.
16. F. Bueno, M. García de la Banda, M.V. Hermenegildo. *Compile-time Optimizations and Analysis Requirements for CC Programs*. Num. CLIP6/93.0, T.U. of Madrid (UPM), July 1993.
17. F. Bueno, M. García de la Banda, M.V. Hermenegildo, F. Rossi, U. Montanari. *Towards True Concurrency Semantics Based Program Transformation between CLP and CC*. Num. CLIP2/93.1(94), T.U. of Madrid (UPM), July 1993.
18. U. Montanari, F. Rossi, F. Bueno, M. García de la Banda, M.V. Hermenegildo. *Contextual Nets and Constraint Logic Programming: Towards a True Concurrent Semantics for CLP*. Num. CLIP 2/93.0, T.U. of Madrid (UPM), January 1993. Presented at the ICLP'93 Post Conference Workshop on Concurrent Constraint Logic Programming.
19. K. Marriott, M. García de la Banda, M.V. Hermenegildo. *Analyzing Logic Programs with Dynamic Scheduling*. Num. CLIP6/93.1, T.U. of Madrid (UPM), October 1992.
20. F. Bueno, M.V. Hermenegildo. *Results on Automatic Translation from Prolog to the Andorra Kernel Language*. Num. CLIP2/91.0, T.U. of Madrid (UPM), September 1991. theory in technical report, "Towards an Automatic Translation Algorithm from Prolog to the Andorra Kernel Language".
21. F. Bueno, M.V. Hermenegildo. *An Automatic Translation Scheme from Prolog to the Andorra Kernel Language*. Num. CLIP1/91.0, T.U. of Madrid, June 1991. also(first version) in Proc. GULP91, results and benchmarks in "Results on Automatic Translation from Prolog to the Andorra Kernel Language".

14 Publications in Constraint Programming

Articles in Refereed Journals:

1. Philipp Körner, Michael Leuschel, João Barbosa, Vítor Santos-Costa, Verónica Dahl, Manuel V. Hermenegildo, Jose F. Morales, Jan Wielemaker, Daniel Diaz, Salvador Abreu, Giovanni Ciatto. *Fifty Years of Prolog and Beyond*. Theory and Practice of Logic Programming, 20th Anniversary Special Issue, Vol. 22, Num. 6, pages 776–858, Cambridge U. Press, May 2022.
2. Agostino Dovier, Andrea Formisano, Gopal Gupta, Manuel V. Hermenegildo, Enrico Pontelli, Ricardo Rocha. *Parallel Logic Programming: A Sequel*. Theory and Practice of Logic Programming, 20th Anniversary Special Issue, Vol. 22, Num. 6, pages 905–973, Cambridge U. Press, March 2022.
3. Joaquín Arias, Seppo Törmä, Manuel Carro, Gopal Gupta. *Building Information Modeling Using Constraint Logic Programming*. Theory and Practice of Logic Programming, Vol. 22, Num. 5, pages 723–738, 2022.
4. Emanuele De Angelis, Fabio Fioravanti, John P. Gallagher, Manuel V. Hermenegildo, Alberto Pettorossi, Maurizio Proietti. *Analysis and Transformation of Constrained Horn Clauses for Program Verification*. Theory and Practice of Logic Programming, Vol. 22, Num. 6, pages 1–69, Cambridge U. Press, November 2021.
5. A. Stivala, P. J. Stuckey, M. García de la Banda, M.V. Hermenegildo, A. Wirth. *Lock-free Parallel Dynamic Programming*. Journal of Parallel and Distributed Computing, Vol. 70, Num. 8, pages 839–848, Elsevier, 2010.
6. P. Lopez-Garcia, F. Bueno, M.V. Hermenegildo. *Automatic Inference of Determinacy and Mutual Exclusion for Logic Programs Using Mode and Type Analyses*. New Generation Computing, Vol. 28, Num. 2, pages 117–206, Ohmsha, Ltd. and Springer, 2010.
7. G. Gupta, E. Pontelli, K. Ali, M. Carlsson, M.V. Hermenegildo. *Parallel Execution of Prolog Programs: a Survey*. ACM Transactions on Programming Languages and Systems, Vol. 23, Num. 4, pages 472–602, ACM Press, July 2001.
8. M. García de la Banda, M.V. Hermenegildo, K. Marriott. *Independence in CLP Languages*. ACM Transactions on Programming Languages and Systems, Vol. 22, Num. 2, pages 269–339, ACM Press, March 2000.
9. M.V. Hermenegildo, G. Puebla, K. Marriott, P. Stuckey. *Incremental Analysis of Constraint Logic Programs*. ACM Transactions on Programming Languages and Systems, Vol. 22, Num. 2, pages 187–223, ACM Press, March 2000.
10. M.V. Hermenegildo. *Some Challenges for Constraint Programming*. The Constraints Journal, Vol. 2, Num. 1, pages 63–69, Kluwer Academic Publishers, 1997. Special issue on strategic directions in constraint programming.
11. P. Van Hentenryck, V. Saraswat, A. Borning, A. Brodski, P. Codognet, R. Dechter, M. Dincbas, E. Freuder, M.V. Hermenegildo, J. Jaffar, S. Kasif, J.-L. Lassez, D. McAllester, Ken McAloon, A. Macworth, U. Montanari, W. Older, J.-F. Puget, R. Ramakrishnan, F. Rossi, G. Smolka, R. Wachter. *Strategic Directions in Constraint Programming*. ACM Computing Surveys, Vol. 28, Num. 4, pages 701–726, ACM, December 1996. 50th Anniversary Issue on Strategic Directions in Computer Research.
12. M. García de la Banda, M.V. Hermenegildo, M. Bruynooghe, V. Dumortier, G. Janssens, W. Simoens. *Global Analysis of Constraint Logic Programs*. ACM Transactions on Programming Languages and Systems, Vol. 18, Num. 5, pages 564–615, ACM, September 1996.

Articles in Refereed Conferences:

1. P. Lopez-Garcia, F. Bueno, M.V. Hermenegildo. *Determinacy Analysis for Logic Programs Using Mode and Type Information*. Proceedings of the 14th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'04), LNCS, Num. 3573, pages 19–35, Springer-Verlag, August 2005.
2. J. Correas, J. M. Gomez, M. Carro, D. Cabeza, M.V. Hermenegildo. *A Generic Persistence Model for CLP Systems (And Two Useful Implementations)*. Proceedings of the Sixth International Symposium on Practical Aspects of Declarative Languages, LNCS, Num. 3057, pages 104–119, Springer-Verlag, June 2004.
3. F. Bueno, P. Lopez-Garcia, M.V. Hermenegildo. *Multivariant Non-Failure Analysis via Standard Abstract Interpretation*. 7th International Symposium on Functional and Logic Programming (FLOPS 2004), LNCS, Num. 2998, pages 100–116, Springer-Verlag, April 2004.
4. J. Correas, J. M. Gomez, M. Carro, D. Cabeza, M.V. Hermenegildo. *A Generic Persistence Model for CLP Systems*. 2003 International Conference on Logic Programming, LNCS, Num. 2916, pages 481–482, Springer-Verlag, December 2003. Extended abstract.
5. M. García de la Banda, F. Bueno, M.V. Hermenegildo. *Towards Independent And-Parallelism in CLP*. Programming Languages: Implementation, Logics, and Programs, LNCS, Num. 1140, pages 77–91, Springer-Verlag, September 1996.
6. M.V. Hermenegildo, The CLIP Group. *Some Methodological Issues in the Design of CIAO - A Generic, Parallel, Concurrent Constraint System*. Principles and Practice of Constraint Programming, LNCS, Num. 874, pages 123–133, Springer-Verlag, May 1994.
7. M. García de la Banda, M.V. Hermenegildo. *A Practical Approach to the Global Analysis of Constraint Logic Programs*. 1993 International Logic Programming Symposium, pages 437–455, MIT Press, October 1993.
8. M. García de la Banda, M.V. Hermenegildo, K. Marriott. *Independence in Constraint Logic Programs*. 1993 International Logic Programming Symposium, pages 130–146, MIT Press, Cambridge, MA, October 1993.

Books and Monographs:

1. P. Deransart, M.V. Hermenegildo, J. Maluszynski. *Analysis and Visualization Tools for Constraint Programming*. LNCS, Num. 1870, 350 pages, Springer-Verlag, September 2000.
2. M. García de la Banda. *Independence, Global Analysis, and Parallelism in Dynamically Scheduled Constraint Logic Programming*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informatica UPM, 28660-Boadilla del Monte, Madrid-Spain, September 1994.

Invited Papers and Tutorials:

1. The Ciao Development Team. *The Ciao Multiparadigm Language and Program Development Environment*. 6 pages, November 2006. The ALP Newsletter 19(3). The Association for Logic Programming..
2. M.V. Hermenegildo, F. Bueno, G. Puebla, P. Lopez-Garcia. *Program Analysis, Debugging and Optimization Using the Ciao System Preprocessor*. 1999 Int'l. Conference on Logic Programming, pages 52–66, MIT Press, November 1999.

3. F. Bueno, P. Deransart, W. Drabent, G. Ferrand, M.V. Hermenegildo, J. Maluszynski, G. Puebla. *On the Role of Semantic Approximations in Validation and Diagnosis of Constraint Logic Programs*. Proc. of the 3rd Int'l. Workshop on Automated Debugging—AADEBUG'97, pages 155–170, U. of Linköping Press, May 1997.

Articles in Books and Other Collections:

1. M. Carro, M.V. Hermenegildo. *Visualization Designs for Constraint Logic Programming*. Vol. 2, Num. 2, pages 27–34, Swiss Informatics Societies, April 2001. Also in UPGRADE. Available through <https://www.svifsi.ch/revue/>.
2. M. Carro, M.V. Hermenegildo. *Diseño de visualizaciones para programación lógica con restricciones*. Num. 150, pages 31–37, Asociación de Técnicos en Informática, March 2001.
3. M. Carro, M.V. Hermenegildo. *Tools for Search Tree Visualization: The APT Tool*. Analysis and Visualization Tools for Constraint Programming, LNCS, Num. 1870, pages 237–252, Springer-Verlag, September 2000.
4. G. Puebla, F. Bueno, M.V. Hermenegildo. *A Generic Preprocessor for Program Validation and Debugging*. Analysis and Visualization Tools for Constraint Programming, LNCS, Num. 1870, pages 63–107, Springer-Verlag, September 2000.
5. G. Puebla, F. Bueno, M.V. Hermenegildo. *An Assertion Language for Constraint Logic Programs*. Analysis and Visualization Tools for Constraint Programming, LNCS, Num. 1870, pages 23–61, Springer-Verlag, September 2000.
6. P. Deransart, M.V. Hermenegildo, J. Maluszynski. *Debugging of Constraint Programs: The DiSCiPl Methodology and Tools*. Analysis and Visualization Tools for Constraint Programming, LNCS, Num. 1870, pages 1–20, Springer-Verlag, September 2000.
7. M. Carro, M.V. Hermenegildo. *Tools for Constraint Visualization: The VIFID/TRIFID Tool*. Analysis and Visualization Tools for Constraint Programming, LNCS, Num. 1870, pages 253–272, Springer-Verlag, September 2000.
8. M.V. Hermenegildo, F. Bueno, D. Cabeza, M. Carro, M. García de la Banda, P. Lopez-Garcia, G. Puebla. *The CIAO Multi-Dialect Compiler and System: An Experimentation Workbench for Future (C)LP Systems*. Parallelism and Implementation of Logic and Constraint Logic Programming, pages 65–85, Nova Science, April 1999.

Publications in Refereed Workshops:

1. Z. Drey, J.F. Morales, M.V. Hermenegildo. *Reversible Language Extensions and their Application in Debugging*. 12th International Colloquium on Implementation of Constraint and Logic Programming Systems (CICLOPS 2012), 15 pages, September 2012.
2. E.J. Gallego-Arias, R. Haemmerlé, M.V. Hermenegildo, J.F. Morales. *The Ciao CLP(FD) Library: A Modular CLP Extension for Prolog*. 12th International Colloquium on Implementation of Constraint and Logic Programming Systems (CICLOPS 2012), 15 pages, September 2012.
3. M.V. Hermenegildo, The Ciao Development Team. *An Overview of The Ciao Multiparadigm Language and Program Development Environment and its Design Philosophy*. ECOOP Workshop on Multiparadigm Programming with Object-Oriented Languages MPOOL 2007, July 2007.
4. C. Vaucheret, S. Guadarrama, S. Muñoz. *Fuzzy Prolog: A Simple Implementation using CLP(R)*. Constraints and Uncertainty, A CP2001 workshop, LNCS, Springer-Verlag, December 2001.

5. G. Puebla, F. Bueno, M.V. Hermenegildo. *An Assertion Language for Debugging of Constraint Logic Programs*. Proceedings of the ILPS'97 Workshop on Tools and Environments for (Constraint) Logic Programming, October 1997. Available from ftp://cliplab.org/pub/papers/assert_lang_tr_discipldeliv.ps.gz as technical report CLIP2/97.1..
6. M.V. Hermenegildo, F. Bueno, D. Cabeza, M. Carro, M. García de la Banda, P. Lopez-Garcia, G. Puebla. *The CIAO Multi-Dialect Compiler and System: A Demo and Status Report*. Proceedings of the JICSLP'96 Workshop on Parallelism and Implementation Technology, 12 pages, Computer Science Department, Technical University of Madrid, September 1996. Available from <https://www.cliplab.org/Projects/COMPULOG/meeting96/papers/PS/clip.ps.gz>.
7. M.V. Hermenegildo, F. Bueno, D. Cabeza, M. Carro, M. García de la Banda, P. Lopez-Garcia, G. Puebla. *The CIAO Multi-Dialect Compiler and System: An Experimentation Workbench for Future (C)LP Systems*. Proc. of the AGP'96 Joint Conference on Declarative Programming, pages 105–108, U. of the Basque Country, July 1996. Available from <ftp://www.cliplab.org/pub/papers>.
8. M.V. Hermenegildo, F. Bueno, M. García de la Banda, G. Puebla. *The CIAO Multi-Dialect Compiler and System: An Experimentation Workbench for Future (C)LP Systems*. Proceedings of the ILPS'95 Workshop on Visions for the Future of Logic Programming, December 1995. Available from <https://www.cliplab.org/>.
9. M. García de la Banda, F. Bueno, M.V. Hermenegildo. *Towards Automatic Compile-Time Parallelization of CLP Programs by Analysis and Transformation*. Proceedings of the ILPS'95 Workshop on Parallel Logic Programming Systems, U. of Oregon, December 1995.
10. M.V. Hermenegildo, The CLIP Group. *The CIAO Multiparadigm Compiler and System: A Progress Report*. Proc. of the Compulog Net Area Workshop on Parallelism and Implementation Technologies, Technical University of Madrid, September 1995.
11. M.V. Hermenegildo, The CLIP Group. *Towards CIAO-Prolog – A Parallel Concurrent Constraint System*. Proc. of the Compulog Net Area Workshop on Parallelism and Implementation Technologies, 10 pages, FIM/UPM, Madrid, Spain, June 1993.
12. V. Dumortier, G. Janssens, W. Simoons, M. García de la Banda. *Combining a Definiteness and a Freeness Abstraction for CLP Languages*. Workshop on Logic Program Synthesis and Transformation, 1993.
13. M. García de la Banda, M.V. Hermenegildo. *Some Considerations on the Compile-Time Analysis of Constraint Logic Programs*. Jornadas Nacionales de Programación Declarativa, pages 97–117, U. Malaga, October 1991.

Technical Reports and Manuals:

1. P. Lopez-Garcia, L. Darmawan, F. Bueno, M.V. Hermenegildo. *Towards Resource Usage Function Verification based on Input Data Size Intervals*. Num. CLIP4/2011.0, Technical University of Madrid (UPM), April 2011. Available at <https://cliplab.org/papers/resource-verif-11-tr.pdf>.
2. P. Lopez-Garcia, L. Darmawan, F. Bueno, M.V. Hermenegildo. *Towards a Framework for Resource Usage Verification and Debugging in the CiaoPP System*. Num. CLIP1/2010.0, Technical University of Madrid (UPM), February 2010. Available at <https://cliplab.org/papers/resource-verif-10-tr.pdf>.

3. P. Lopez-Garcia, F. Bueno, M.V. Hermenegildo. *Inferring Determinacy and Mutual Exclusion in Logic Programs Using Mode and Type Analysis*. Num. CLIP2/2009.0, Technical University of Madrid (UPM), February 2009.
4. M.V. Hermenegildo, E. Albert, P. Arenas, F. Bueno, M. Carro, A. Casas, P. Chico de Guzmán, J. Correas, S. Genaim, J. Lipton, Pedro Lopez-Garcia, M. Méndez, E. Mera, J. Morales, J. Navas, R. Padilla, P. Pietrzak, G. Puebla, M. Zamalloa, D. Zanardini. *Rigorous Methods for Mobile and Heterogeneous Software Systems – Second Year Report*. Num. CLIP3/2008.0, Technical University of Madrid (UPM), April 2008.
5. M.V. Hermenegildo, E. Albert, P. Arenas, A. Beascoa, F. Bueno, D. Cabeza, M. Carro, J. Correas, A. García Pañoso, J. Lipton, P. Lopez-Garcia, E. Mera, J. Morales, C. Ochoa, G. Puebla. *Rigorous Methods for Mobile and Heterogeneous Software Systems – First Year Report*. Num. CLIP4/2007.0, Technical University of Madrid (UPM), March 2007.
6. P. Lopez-Garcia, F. Bueno, M.V. Hermenegildo. *Inferring Determinacy in Logic Programs Using Mode and Type Information*. Num. CLIP3/2007.0, Technical University of Madrid (UPM), February 2007.
7. M.V. Hermenegildo, The Ciao Development Team. *Why Ciao? –An Overview of the Ciao System’s Design Philosophy*. Num. CLIP7/2006.0, 6 pages, Technical University of Madrid (UPM), December 2006. Available from: <https://cliplab.org/papers/ciao-philosophy-note-tr.pdf>.
8. F. Bueno, P. Lopez-Garcia, G. Puebla, M.V. Hermenegildo. *The Ciao Preprocessor*. Num. CLIP1/06, 99 pages, Technical University of Madrid (UPM), January 2006.
9. F. Bueno, P. Lopez-Garcia, G. Puebla, M.V. Hermenegildo. *A Tutorial on Program Development and Optimization using the Ciao Preprocessor*. Num. CLIP2/06, 55 pages, Technical University of Madrid (UPM), January 2006.
10. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla (Eds.). *The Ciao System. Reference Manual (V1.10)*. School of Computer Science, Technical University of Madrid (UPM), June 2004. System and on-line version of the manual available at <https://ciao-lang.org>.
11. F. Bueno, P. Lopez-Garcia, G. Puebla, M.V. Hermenegildo. *The Ciao Prolog Preprocessor*. Num. CLIP1/04, 72 pages, Technical University of Madrid (UPM), January 2004.
12. F. Bueno. *CiaoPP Internals*. Num. CLIP2/04, 66 pages, Technical University of Madrid (UPM), January 2004.
13. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.8)*. Num. CLIP4/2002.1, School of Computer Science, Technical University of Madrid (UPM), May 2002. System and on-line version of the manual available at <https://ciao-lang.org>.
14. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.6)*. Num. CLIP5/2000.1, School of Computer Science, Technical University of Madrid (UPM), July 2000. System and on-line version of the manual available at <https://ciao-lang.org>.
15. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.0)*. Num. CLIP11/99.1, School of Computer Science, Technical University of Madrid (UPM), June 1999. System and on-line version of the manual available at <https://ciao-lang.org>.

16. F. Bueno, P. Lopez-Garcia, G. Puebla, M.V. Hermenegildo, P. Pietrzak. *The CHIP Assertion Preprocessor*. Num. CLIP1/99.1, 50 pages, Technical University of Madrid (UPM), March 1999. Also as deliverable of the ESPRIT project DISCIPL.
17. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V0.6)*. Num. CLIP12/98.1, School of Computer Science, Technical University of Madrid (UPM), July 1998. System and on-line version of the manual available at <https://ciao-lang.org>.
18. M. Carro, M.V. Hermenegildo, F. Bueno, D. Cabeza, M. J. García, P. Lopez-Garcia. *An Introductory Course on Constraint Logic Programming*. 130 pages, Technical University of Madrid, 1998.
19. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual*. Num. CLIP3/97.1, School of Computer Science, Technical University of Madrid (UPM), August 1997. System and on-line version of the manual available at <https://ciao-lang.org>.
20. F. Bueno, M.V. Hermenegildo. *An Automatic Translation Scheme from CLP to AKL*. Facultad de Informática, UPM, June 1995.
21. M. García de la Banda, F. Bueno, M.V. Hermenegildo. *Automatic Compile-Time Parallelization of CLP Programs by Analysis and Transformation to a Concurrent Constraint Language*. Facultad de Informática, UPM, June 1995. Also in ILPS'95 WS on Parallel Logic Programming Systems.
22. M. García de la Banda, M.V. Hermenegildo, K. Marriott. *Independence and Search Space Preservation in Dynamically Scheduled Constraint Logic Languages*. Facultad de Informática, UPM, February 1995.
23. F. Bueno, F. Rossi, M.V. Hermenegildo. *Concurrent Semantics Based Optimizations of cc and CLP*. Num. CLIP2/93.2, T.U. of Madrid (UPM), September 1994.
24. M. García de la Banda, M.V. Hermenegildo, K. Marriott. *Search Space Preservation in CLP Languages*. Num. CLIP11/94.0, T. University of Madrid (UPM), September 1994.
25. M. García de la Banda, M.V. Hermenegildo, M. Bruynooghe, V. Dumortier, G. Janssens, W. Simoens. *Global Analysis of Constraint Logic Programs*. U. of Madrid (UPM), 1994.
26. U. Montanari, F. Rossi, F. Bueno, M. García de la Banda, M.V. Hermenegildo. *Contextual Nets and Constraint Logic Programming: Towards a True Concurrent Semantics for CLP*. Num. CLIP 2/93.0, T.U. of Madrid (UPM), January 1993. Presented at the ICLP'93 Post Conference Workshop on Concurrent Constraint Logic Programming.
27. M. García de la Banda, M.V. Hermenegildo, K. Marriott. *Independence in Constraint Logic Programs*. Num. CLIP6/92.0, U. of Madrid (UPM), November 1992.
28. M. García de la Banda, M.V. Hermenegildo. *A Practical Approach to the Global Analysis of Constraint Logic Programs*. Num. without, U. of Madrid (UPM), April 1992. Presented at the 1992 FGCS Post-Conference Workshop on Constraint Logic Programming.
29. M. García de la Banda, M.V. Hermenegildo. *Analyzing Constraint Logic Programs*. Num. CLIP4/91.0, U. of Madrid (UPM), January 1991. Presented in ICLP-91 Workshop on Constraint Logic Programming, Paris.

15 Publications in Programming Language Implementation

Articles in Refereed Journals:

1. Philipp Körner, Michael Leuschel, João Barbosa, Vítor Santos-Costa, Verónica Dahl, Manuel V. Hermenegildo, Jose F. Morales, Jan Wielemaker, Daniel Diaz, Salvador Abreu, Giovanni Ciatto. *Fifty Years of Prolog and Beyond*. Theory and Practice of Logic Programming, 20th Anniversary Special Issue, Vol. 22, Num. 6, pages 776–858, Cambridge U. Press, May 2022.
2. Agostino Dovier, Andrea Formisano, Gopal Gupta, Manuel V. Hermenegildo, Enrico Pontelli, Ricardo Rocha. *Parallel Logic Programming: A Sequel*. Theory and Practice of Logic Programming, 20th Anniversary Special Issue, Vol. 22, Num. 6, pages 905–973, Cambridge U. Press, March 2022.
3. I. Garcia-Contreras, J. F. Morales, M.V. Hermenegildo. *Incremental and Modular Context-sensitive Analysis*. Theory and Practice of Logic Programming, Vol. 21, Num. 2, pages 196–243, Cambridge U. Press, January 2021.
4. Joaquín Arias, Manuel Carro. *Evaluation of the Implementation of an Abstract Interpretation Algorithm using Tabled CLP*. Theory and Practice of Logic Programming, Vol. 19, Num. 5-6, pages 1107–1123, September 2019. Special Issue on ICLP'19.
5. Joaquín Arias, Manuel Carro. *Description, Implementation, and Evaluation of a Generic Design for Tabled CLP*. Theory and Practice of Logic Programming, Vol. 19, Num. 3, pages 412–448, Cambridge U. Press, May 2019.
6. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Some Trade-offs in Reducing the Overhead of Assertion Run-time Checks via Static Analysis*. Science of Computer Programming, Vol. 155, pages 3–26, Elsevier North-Holland, April 2018. Selected and Extended papers from the 2016 International Symposium on Principles and Practice of Declarative Programming.
7. Joaquín Arias, Manuel Carro, Elmer Salazar, Kyle Marple, Gopal Gupta. *Constraint Answer Set Programming without Grounding*. Theory and Practice of Logic Programming, Vol. 18, Num. 3-4, pages 337–354, Cambridge U. Press, 2018.
8. J.F. Morales, M. Carro, M.V. Hermenegildo. *Description and Optimization of Abstract Machines in a Dialect of Prolog*. Theory and Practice of Logic Programming, Vol. 16, Num. 1, pages 1–58, Cambridge University Press, January 2016.
9. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *An Overview of Ciao and its Design Philosophy*. Theory and Practice of Logic Programming, Vol. 12, Num. 1–2, pages 219–252, Cambridge University Press, January 2012.
10. J. F. Morales, R. Haemmerlé, M. Carro, M.V. Hermenegildo. *Lightweight compilation of (C)LP to JavaScript*. Theory and Practice of Logic Programming, 28th Int'l. Conference on Logic Programming (ICLP'12) Special Issue, Vol. 12, Num. 4-5, pages 755–773, Cambridge U. Press, 2012.
11. P. Chico de Guzmán, A. Casas, M. Carro, M.V. Hermenegildo. *Parallel Backtracking with Answer Memoing for Independent And-Parallelism*. Theory and Practice of Logic Programming, 27th Int'l. Conference on Logic Programming (ICLP'11) Special Issue, Vol. 11, Num. 4–5, pages 555–574, Cambridge U. Press, July 2011.
12. P. Chico de Guzmán, M. Carro, David S. Warren. *Swapping Evaluation: A Memory-Scalable Solution for Answer-On-Demand Tabling*. Theory and Practice of Logic Programming, 26th Int'l. Conference on Logic Programming (ICLP'10) Special Issue, Vol. 10 (4–6), pages 401–416, Cambridge U. Press, July 2010.

13. A. Stivala, P. J. Stuckey, M. García de la Banda, M.V. Hermenegildo, A. Wirth. *Lock-free Parallel Dynamic Programming*. Journal of Parallel and Distributed Computing, Vol. 70, Num. 8, pages 839–848, Elsevier, 2010.
14. P. Lopez-Garcia, F. Bueno, M.V. Hermenegildo. *Automatic Inference of Determinacy and Mutual Exclusion for Logic Programs Using Mode and Type Analyses*. New Generation Computing, Vol. 28, Num. 2, pages 117–206, Ohmsha, Ltd. and Springer, 2010.
15. M.V. Hermenegildo, G. Puebla, F. Bueno, P. Lopez-Garcia. *Integrated Program Debugging, Verification, and Optimization Using Abstract Interpretation (and The Ciao System Preprocessor)*. Science of Computer Programming, Vol. 58, Num. 1–2, pages 115–140, Elsevier North-Holland, October 2005.
16. G. Gupta, E. Pontelli, K. Ali, M. Carlsson, M.V. Hermenegildo. *Parallel Execution of Prolog Programs: a Survey*. ACM Transactions on Programming Languages and Systems, Vol. 23, Num. 4, pages 472–602, ACM Press, July 2001.
17. E. Pontelli, G. Gupta, D. Tang, M. Carro, M.V. Hermenegildo. *Improving the Efficiency of Nondeterministic And-parallel Systems*. The Computer Languages Journal, Vol. 22, Num. 2/3, pages 115–142, Pergamon/Elsevier, July 1996.
18. G. Gupta, M.V. Hermenegildo, V. Santos-Costa. *And-Or Parallel Prolog: A Recomputation Based Approach*. New Generation Computing, Vol. 11, Num. 3–4, pages 297–323, Springer Verlag, 1993.
19. M.V. Hermenegildo, K. Greene. *The \mathcal{E} -Prolog System: Exploiting Independent And-Parallelism*. New Generation Computing, Vol. 9, Num. 3,4, pages 233–257, Springer Verlag, 1991.
20. M.V. Hermenegildo, E. Tick. *Memory Referencing Characteristics and Caching Performance of AND-Parallel Prolog on Shared-Memory Architectures*. New Generation Computing, Vol. 7, Num. 1, pages 37–58, Springer Verlag, October 1989.
21. M.V. Hermenegildo, R. Warren. *Designing a High-Performance Parallel Logic Programming System*. Computer Architecture News, Special Issue on Parallel Symbolic Programming, Vol. 15, Num. 1, pages 43–53, ACM, March 1987.

Articles in Refereed Conferences:

1. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Incremental Analysis of Logic Programs with Assertions and Open Predicates*. Proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), LNCS, Vol. 12042, pages 36–56, Springer, 2020.
2. Joaquín Arias, Zhuo Chen, Manuel Carro, Gopal Gupta. *Modeling and Reasoning in Event Calculus Using Goal-Directed Constraint Answer Set Programming*. Post-Proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), LNCS, Vol. 12042, pages 139–155, Springer-Verlag, 2020.
3. Joaquín Arias, Manuel Carro. *Incremental Evaluation of Lattice-Based Aggregates in Logic Programming Using Modular TCLP*. 21st Int'l. Symposium on Practical Aspects of Declarative Languages, LNCS, Vol. 11372, pages 98–114, Springer, January 2019.
4. M. Klemen, N. Stulova, P. Lopez-Garcia, J. F. Morales, M.V. Hermenegildo. *Static Performance Guarantees for Programs with Run-time Checks*. 20th Int'l. ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming (PPDP'18), 13 pages, ACM Press, September 2018.

5. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Exploiting Term Hiding to Reduce Runtime Checking Overhead*. 20th International Symposium on Practical Aspects of Declarative Languages (PADL 2018), LNCS, Num. 10702, pages 99–115, Springer-Verlag, January 2018.
6. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Reducing the Overhead of Assertion Runtime Checks via Static Analysis*. 18th Int'l. ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming (PPDP'16), pages 90–103, ACM Press, September 2016.
7. Salvador Tamarit, Guillermo Viguera, Manuel Carro, Julio Mariño. *A Haskell Implementation of a Rule-Based Program Transformation for C Programs*. International Symposium on Practical Aspects of Declarative Languages, LNCS, Num. 9131, pages 105–114, Springer-Verlag, June 2015.
8. J.F. Morales, M.V. Hermenegildo. *Pre-Indexed Terms for Prolog*. Post-Proceedings of the 24th International Symposium on Logic-Based Program Synthesis and Transformation (LOPSTR'14), LNCS, Vol. 8981, pages 317–331, Springer, 2015.
9. Z. Drey, J. F. Morales, M.V. Hermenegildo, M. Carro. *Reversible Language Extensions and their Application in Debugging*. Practical Aspects of Declarative Languages (PADL'13), LNCS, Vol. 7752, Springer, January 2013.
10. P. Chico de Guzmán, M. Carro, M.V. Hermenegildo. *Supporting Pruning in Tabled LP*. Practical Aspects of Declarative Languages (PADL'13), LNCS, Springer Verlag, January 2013.
11. P. Chico de Guzmán, M. Carro, M.V. Hermenegildo, P. Stuckey. *A General Implementation Framework for Tabled CLP*. FLOPS'12, LNCS, Num. 7294, pages 104–119, Springer Verlag, May 2012.
12. P. Chico de Guzmán, M. Carro, M.V. Hermenegildo, P. Stuckey. *A General Implementation Framework for Tabled CLP*. 15th Int'l. Symposium on Functional and Logic Programming, LNCS, Vol. 7294, pages 104–119, Springer Verlag, May 2012.
13. E. Albert, P. Arenas, M. Gómez-Zamalloa. *Symbolic Execution of Concurrent Objects in CLP*. Practical Aspects of Declarative Languages (PADL'12), LNCS, Vol. 7149, pages 123–137, Springer, January 2012.
14. P. Chico de Guzmán, A. Casas, M. Carro, M.V. Hermenegildo. *A Segment-Swapping Approach for Executing Trapped Computations*. PADL'12, LNCS, Vol. 7149, pages 138–152, Springer Verlag, January 2012.
15. E. Mera, T. Trigo, P. Lopez-Garcia, M.V. Hermenegildo. *Profiling for Run-Time Checking of Computational Properties and Performance Debugging in Logic Programs*. Practical Aspects of Declarative Languages (PADL'11), Lecture Notes in Computer Science, Vol. 6539, pages 38–53, Springer-Verlag, January 2011.
16. L. Scandolo, C. Kunz, G. Barthe, M.V. Hermenegildo. *Program Parallelization using Synchronized Pipelining*. Proceedings of the 19th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'09), LNCS, Vol. 6037, pages 173–187, Springer, 2010.
17. P. Chico de Guzmán, M. Carro, M.V. Hermenegildo. *A Tabling Implementation Based on Variables with Multiple Bindings*. International Conference on Logic Programming (ICLP 2009), LNCS, Num. 5649, pages 190–204, Springer-Verlag, July 2009.

18. P. Chico de Guzmán, M. Carro, M.V. Hermenegildo. *Towards a Complete Scheme for Tabled Execution Based on Program Transformation*. 11th International Symposium on Practical Aspects of Declarative Languages (PADL'09), LNCS, Num. 5418, pages 224–238, Springer-Verlag, January 2009.
19. P. Chico de Guzmán, M. Carro, M.V. Hermenegildo. *A Sketch of a Complete Scheme for Tabled Execution Based on Program Transformation*. Int'l. Conference on Logic Programming, LNCS, Vol. 5366, pages 795–800, Springer Verlag, December 2008. Short paper.
20. A. Casas, M. Carro, M.V. Hermenegildo. *A High-Level Implementation of Non-Deterministic, Unrestricted, Independent And-Parallelism*. 24th International Conference on Logic Programming (ICLP'08), LNCS, Vol. 5366, pages 651–666, Springer-Verlag, December 2008.
21. J. Morales, M. Carro, M.V. Hermenegildo. *Comparing Tag Scheme Variations Using an Abstract Machine Generator*. 10th Int'l. ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming (PPDP'08), pages 32–43, ACM Press, July 2008.
22. P. Chico de Guzmán, M. Carro, M.V. Hermenegildo, Claudio Silva, Ricardo Rocha. *An Improved Continuation Call-Based Implementation of Tabling*. 10th International Symposium on Practical Aspects of Declarative Languages (PADL'08), LNCS, Vol. 4902, pages 198–213, Springer-Verlag, January 2008.
23. A. Casas, M. Carro, M.V. Hermenegildo. *Towards a High-Level Implementation of Execution Primitives for Unrestricted, Independent And-parallelism*. 10th International Symposium on Practical Aspects of Declarative Languages (PADL'08), LNCS, Vol. 4902, pages 230–247, Springer-Verlag, January 2008.
24. J.F. Morales, M. Carro, M.V. Hermenegildo. *Towards Description and Optimization of Abstract Machines in an Extension of Prolog*. Logic-Based Program Synthesis and Transformation (LOPSTR'06), LNCS, Num. 4407, pages 77–93, July 2007.
25. M. Carro, J. Morales, H.L. Muller, G. Puebla, M.V. Hermenegildo. *High-Level Languages for Small Devices: A Case Study*. Compilers, Architecture, and Synthesis for Embedded Systems, pages 271–281, ACM Press / Sheridan, October 2006.
26. A. Casas, D. Cabeza, M.V. Hermenegildo. *A Syntactic Approach to Combining Functional Notation, Lazy Evaluation and Higher-Order in LP Systems*. The 8th International Symposium on Functional and Logic Programming (FLOPS'06), pages 142–162, April 2006.
27. J. Morales, M. Carro, G. Puebla, M.V. Hermenegildo. *A Generator of Efficient Abstract Machine Implementations and its Application to Emulator Minimization*. International Conference on Logic Programming, LNCS, Num. 3668, pages 21–36, Springer Verlag, October 2005.
28. P. Lopez-Garcia, F. Bueno, M.V. Hermenegildo. *Determinacy Analysis for Logic Programs Using Mode and Type Information*. Proceedings of the 14th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'04), LNCS, Num. 3573, pages 19–35, Springer-Verlag, August 2005.
29. J. Morales, M. Carro, M.V. Hermenegildo. *Improving the Compilation of Prolog to C Using Moded Types and Determinism Information*. Proceedings of the Sixth International Symposium on Practical Aspects of Declarative Languages, Lecture Notes in Computer Science, Vol. 3057, pages 86–103, Springer-Verlag, June 2004.
30. F. Bueno, P. Lopez-Garcia, M.V. Hermenegildo. *Multivariant Non-Failure Analysis via Standard Abstract Interpretation*. 7th International Symposium on Functional and Logic Programming (FLOPS 2004), LNCS, Num. 2998, pages 100–116, Springer-Verlag, April 2004.

31. C. Vaucheret, S. Guadarrama, S. Muñoz. *Fuzzy Prolog: A Simple General Implementation using CLP(R)*. 9th International Conference on Logic for Programming Artificial Intelligence and Reasoning, October 2002.
32. S. Muñoz, J.J. Moreno-Navarro, M.V. Hermenegildo. *Efficient Negation Using Abstract Interpretation*. Proc. of the Eighth International Conference on Logic Programming and Automated Reasoning, LNAI, 15 pages, Springer-Verlag, December 2001.
33. D. Cabeza, M.V. Hermenegildo. *A New Module System for Prolog*. International Conference on Computational Logic, CL2000, LNAI, Num. 1861, pages 131–148, Springer-Verlag, July 2000.
34. M. Carro, M.V. Hermenegildo. *Concurrency in Prolog Using Threads and a Shared Database*. 1999 International Conference on Logic Programming, pages 320–334, MIT Press, Cambridge, MA, USA, November 1999.
35. K. Shen, M.V. Hermenegildo. *Flexible Scheduling for Non-Deterministic, And-parallel Execution of Logic Programs*. Proceedings of EuroPar'96, LNCS, Num. 1124, pages 635–640, Springer-Verlag, August 1996.
36. M.V. Hermenegildo, D. Cabeza, M. Carro. *Using Attributed Variables in the Implementation of Concurrent and Parallel Logic Programming Systems*. Proc. of the Twelfth International Conference on Logic Programming, pages 631–645, MIT Press, June 1995.
37. E. Pontelli, G. Gupta, M.V. Hermenegildo. *εACE: A High-Performance Parallel Prolog System*. International Parallel Processing Symposium, pages 564–572, IEEE Computer Society, IEEE Computer Society Technical Committee on Parallel Processing, April 1995.
38. G. Gupta, M.V. Hermenegildo, E. Pontelli, V. Santos-Costa. *ACE: And/Or-parallel Copying-based Execution of Logic Programs*. International Conference on Logic Programming, pages 93–110, MIT Press, June 1994.
39. M.V. Hermenegildo, The CLIP Group. *Some Methodological Issues in the Design of CIAO - A Generic, Parallel, Concurrent Constraint System*. Principles and Practice of Constraint Programming, LNCS, Num. 874, pages 123–133, Springer-Verlag, May 1994.
40. M. Olmedilla, F. Bueno, M.V. Hermenegildo. *Automatic Exploitation of Non-Determinate Independent And-Parallelism in the Basic Andorra Model*. Logic Program Synthesis and Transformation, 1993, Workshops in Computing, pages 177–195, Springer-Verlag, July 1993.
41. H. Kuchen, J. Moreno-Navarro, M.V. Hermenegildo. *Independent AND-Parallel Implementation of Narrowing*. Proc. 4th Int'l. Symposium on Programming Language Implementation and Logic Programming, LNCS, Num. 631, pages 24–38, Springer-Verlag, August 1992.
42. G. Gupta, M.V. Hermenegildo. *Recomputation based Implementation of And-Or Parallel Prolog*. Proc. of the 1992 International Conference on Fifth Generation Computer Systems, pages 770–782, Institute for New Generation Computer Technology (ICOT), June 1992.
43. F. Bueno, M.V. Hermenegildo. *An Automatic Translation Scheme from Prolog to the Andorra Kernel Language*. Proc. of the 1992 International Conference on Fifth Generation Computer Systems, Vol. 2, pages 759–769, Institute for New Generation Computer Technology (ICOT), June 1992.
44. G. Gupta, V. Santos-Costa, R. Yang, M.V. Hermenegildo. *IDIOM: Integrating Dependent And-, Independent And-, and Or-parallelism*. 1991 International Logic Programming Symposium, pages 152–166, MIT Press, October 1991.

45. K. Muthukumar, M.V. Hermenegildo. *The CDG, UDG, and MEL Methods for Automatic Compile-time Parallelization of Logic Programs for Independent And-parallelism*. Int'l. Conference on Logic Programming, pages 221–237, MIT Press, June 1990.
46. M.V. Hermenegildo, F. Rossi. *Non-Strict Independent And-Parallelism*. 1990 International Conference on Logic Programming, pages 237–252, MIT Press, Association for Logic Programming, June 1990.
47. M.V. Hermenegildo, K. Greene. *ℳ-Prolog and its Performance: Exploiting Independent And-Parallelism*. 1990 International Conference on Logic Programming, pages 253–268, MIT Press, Association for Logic Programming, June 1990.
48. M.V. Hermenegildo. *Bridging the Performance Gap between Declarative and Imperative Languages*. 4th. International Symposium on Knowledge Engineering, pages 91–104, Xerox Corp., May 1990.
49. M.V. Hermenegildo. *Relating Goal Scheduling, Precedence, and Memory Management in AND-Parallel Execution of Logic Programs*. Fourth International Conference on Logic Programming, pages 556–575, MIT Press, University of Melbourne, May 1987.
50. M.V. Hermenegildo, R. I. Nasr. *Efficient Management of Backtracking in AND-parallelism*. Third International Conference on Logic Programming, LNCS, Num. 225, pages 40–55, Springer-Verlag, Imperial College, July 1986.
51. M.V. Hermenegildo. *An Abstract Machine for Restricted AND-parallel Execution of Logic Programs*. Third International Conference on Logic Programming, Lecture Notes in Computer Science, Num. 225, pages 25–40, Springer-Verlag, Imperial College, July 1986.

Books and Monographs:

1. David S. Warren, Veronica Dahl, Thomas Eiter, Manuel V. Hermenegildo, Robert Kowalski, Francesca Rossi. *Prolog - The Next 50 Years*. LNCS, Num. 13900, Springer, July 2023.
2. Nataliia Stulova. *Dynamic Checking of Assertions for Higher-order Predicates*. Ms. Thesis, Technical University of Madrid, School of Computer Science, E-28660, Boadilla del Monte, Madrid, Spain, 73 pages, July 2013.
3. P. Chico de Guzmán. *Advanced Evaluation Strategies for Tabling and Parallelism in Logic Programs*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informática UPM, 28660-Boadilla del Monte, Madrid-Spain, November 2012.
4. E. Mera. *A Unified Framework for Resource and Execution Time Analysis, Run-Time Checking and Unit-Testing*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informática UPM, 28660-Boadilla del Monte, Madrid-Spain, November 2010.
5. J.F. Morales. *Advanced Compilation Techniques for Logic Programming*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informática UPM, 28660-Boadilla del Monte, Madrid-Spain, July 2010.
6. A. Casas. *Automatic Unrestricted Independent And-Parallelism in Declarative Multiparadigm Languages*. Ph.D. Thesis, University of New Mexico (UNM), Electrical and Computer Engineering Department, University of New Mexico, Albuquerque, NM 87131-0001 (USA), September 2008.
7. D. Cabeza. *An Extensible, Global Analysis Friendly Logic Programming System*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informática UPM, 28660-Boadilla del Monte, Madrid-Spain, August 2004.

8. J. Navas. *CoLogNetWS: Desarrollo de un Sitio Web con Actualización Distribuida de las Bases de Datos en varios nodos*. Ms. Thesis, Technical University of Madrid, School of Computer Science, E-28660, Boadilla del Monte, Madrid, Spain, 196 pages, December 2003.
9. M. Carro. *Some Contributions to the Study of Parallelism and Concurrency in Logic Programming*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informatica UPM, 28660-Boadilla del Monte, Madrid-Spain, November 2001.
10. J.M. Gómez. *WebDB: Un Interfaz WWW a Bases de Datos Genérico*. Ms. Thesis, Technical University of Madrid, School of Computer Science, E-28660, Boadilla del Monte, Madrid, Spain, 156 pages, September 1999.
11. F. Bueno Carrillo. *Automatic Optimisation and Parallelisation of Logic Programs through Program Transformation*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), October 1994.
12. M. Carro. *Implementation of Non-Determinism and Optimization of the Memory Usage in the And-Parallel Execution of Logic Programs*. Ms. Thesis, T. University of Madrid (UPM), Facultad de Informática, Madrid, 28660, 99 pages, December 1993. In Spanish.
13. F. Bueno Carrillo. *Traducción Automática de Prolog al Andorra Kernel Language (Automatic Translation from Prolog to the Andorra Kernel Language)*. Ms. Thesis, T.U. of Madrid (UPM), Facultad de Informática, Madrid, 28660, December 1991.
14. M.V. Hermenegildo. *An Abstract Machine Based Execution Model for Computer Architecture Design and Efficient Implementation of Logic Programs in Parallel*. Ph.D. Thesis, Dept. of Electrical and Computer Engineering (Dept. of Computer Science TR-86-20), University of Texas at Austin, Austin, Texas 78712, 244 pages, UMI, Boston, MA and U. of Texas, August 1986.

Invited Papers and Tutorials:

1. M.V. Hermenegildo. *50-Years of Prolog and Beyond (invited talk)*. November 2022. Keynote given at the Prolog 50th Anniversary ‘Prolog Day Symposium’.
2. M.V. Hermenegildo. *Some reflections on Prolog’s evolution, status, and future on the 50th anniversary of the birth of Prolog (abstract of invited talk)*. 38th International Conference on Logic Programming (ICLP’22 at FLoC’22), August 2022.
3. M.V. Hermenegildo, M. Carro, P. Lopez-Garcia, J.F. Morales, J. Arias, I. Garcia-Contreras, M. Klemen, N. Stulova. *25 Years of Ciao (abstract of invited tutorial)*. Pre-proceedings of the 28th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR’18), September 2018. Talk slides at https://cliplab.org/papers/ciao_tut_lopstr18.pdf.
4. The Ciao Development Team. *The Ciao Multiparadigm Language and Program Development Environment*. 6 pages, November 2006. The ALP Newsletter 19(3). The Association for Logic Programming..
5. M.V. Hermenegildo, G. Puebla, F. Bueno, P. Lopez-Garcia. *Program Development Using Abstract Interpretation (and The Ciao System Preprocessor)*. 10th International Static Analysis Symposium (SAS’03), LNCS, Num. 2694, pages 127–152, Springer-Verlag, June 2003.
6. M.V. Hermenegildo, F. Bueno, G. Puebla, P. Lopez-Garcia. *Program Analysis, Debugging and Optimization Using the Ciao System Preprocessor*. 1999 Int’l. Conference on Logic Programming, pages 52–66, MIT Press, November 1999.

Articles in Books and Other Collections:

1. Gopal Gupta, Elmer Salazar, Joaquín Arias, Kinjal Basu, S Varanasi, M Carro. *Prolog: Past, Present, and Future*. Prolog - The Next 50 Years, LNCS, Num. 13900, Springer, July 2023.
2. M.V. Hermenegildo, J.F. Morales, P. Lopez-Garcia, M. Carro. *Types, modes and so much more – the Prolog way*. Prolog - The Next 50 Years, LNCS, Num. 13900, pages 23–37, Springer, July 2023.
3. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, J.F. Morales, G. Puebla. *An Overview of The Ciao Multiparadigm Language and Program Development Environment and its Design Philosophy*. Festschrift for Ugo Montanari, LNCS, Vol. 5065, pages 209–237, Springer-Verlag, June 2008.
4. R. Bagnara, M. Carro. *Foreign Language Interfaces for Prolog: a Terse Survey*. The ALP Newsletter, Vol. 15, Num. 2, The Association for Logic Programming, May 2002. Available from <https://dtai.cs.kuleuven.be/projects/ALP/newsletter/may02/index.html>.
5. M.V. Hermenegildo, F. Bueno, D. Cabeza, M. Carro, M. García de la Banda, P. Lopez-Garcia, G. Puebla. *The CIAO Multi-Dialect Compiler and System: An Experimentation Workbench for Future (C)LP Systems*. Parallelism and Implementation of Logic and Constraint Logic Programming, pages 65–85, Nova Science, April 1999.
6. K. Shen, M.V. Hermenegildo. *Divided We Stand: Parallel Distributed Stack Memory Management*. Implementations of Logic Programming Systems, pages 185–203, Kluwer Academic Publishers, 1994.

Publications in Refereed Workshops:

1. G. Garcia-Pradales, J.F. Morales, M.V. Hermenegildo, J. Arias, M. Carro. *An s(CASP) In-Browser Playground based on Ciao Prolog*. Proceedings of the 38th ICLP Workshops - Goal-directed Execution of Answer Set Programs, Vol. 3193, CEUR-WS.org, August 2022.
2. Joaquín Arias, Gopal Gupta, Manuel Carro. *A Short Tutorial on s(CASP), a Goal-directed Execution of Constraint Answer Set Programs*. Proceedings of the 37th ICLP 2021 Workshops, Vol. 2970, CEUR-WS.org, 2021.
3. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Experiments in Context-Sensitive Incremental and Modular Static Analysis in CiaoPP*. 10th Workshop on Tools for Automatic Program Analysis (TAPAS'19), October 2019. (Extended Abstract).
4. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Incremental Analysis of Logic Programs with Assertions and Open Predicates*. Pre-proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), October 2019.
5. J. Arias, Z. Chen, M. Carro, G. Gupta. *Modeling and Reasoning in Event Calculus Using Goal-Directed Constraint Answer Set Programming*. Pre-Proc. of the 29th Int'l. Symposium on Logic-based Program Synthesis and Transformation, September 2019.
6. Joaquín Arias, Manuel Carro, Zhuo Chen, Gopal Gupta. *Constraint Answer Set Programming without Grounding and its Applications*. 3rd Int'l. Workshop on the Resurgence of Datalog in Academia and Industry (Datalog 2.0), Vol. 2368, pages 22–26, CEUR-WS, June 2019.

7. I. Garcia-Contreras, J. F. Morales, M.V. Hermenegildo. *Towards Incremental and Modular Context-sensitive Analysis*. Technical Communications of the 34th International Conference on Logic Programming (ICLP 2018), OpenAccess Series in Informatics (OASICs), 2 pages, Dagstuhl Press, July 2018. (Extended Abstract).
8. M. Klemen, N. Stulova, P. Lopez-Garcia, J. F. Morales, M.V. Hermenegildo. *Towards Static Performance Guarantees for Programs with Run-time Checks*. Technical Communications of the 34th International Conference on Logic Programming (ICLP 2018), OpenAccess Series in Informatics (OASICs), 2 pages, July 2018. (Extended Abstract).
9. Salvador Tamarit, Julio Mariño, Guillermo Viguera, Manuel Carro. *Towards a Semantics-Aware Code Transformation Toolchain for Heterogeneous Systems*. Proceedings of XIV Jornadas sobre Programación y Lenguajes (PROLE 2016), EPTCS, September 2017.
10. Guillermo Viguera, Manuel Carro, Salvador Tamarit, Julio Mariño. *Towards Automatic Learning of Heuristics for Mechanical Transformations of Procedural Code*. Proceedings of XIV Jornadas sobre Programación y Lenguajes (PROLE 2016), EPTCS, September 2017.
11. Nataliia Stulova. *On Improving Run-time Checking in Dynamic Languages*. Technical Communications of the 33rd International Conference on Logic Programming (ICLP 2017), OpenAccess Series in Informatics (OASICs), Vol. 58, pages 1501–1510, Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, 2017. CP/ICLP/SAT Doctoral Program 2017.
12. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Towards Run-time Checks Simplification via Term Hiding*. Technical Communications of the 33rd International Conference on Logic Programming (ICLP 2017), OpenAccess Series in Informatics (OASICs), Vol. 58, pages 91–93, Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, 2017. (Extended Abstract).
13. Jan Kuper, Lutz Schubert, Kilian Kempf, Colin Glas, Daniel Rubio Bonilla, Manuel Carro. *Program Transformations in the POLCA Project*. Design, Automation, and Testing in Europe, EDAA, March 2016.
14. Guillermo Viguera, Manuel Carro, Salvador Tamarit, Julio Mariño. *Towards Automatic Learning of Heuristics for Mechanical Transformations of Procedural Code*. Proceedings of the First International Workshop on Program Transformation for Programmability in Heterogeneous Architectures (PROHA 2016), March 2016.
15. Salvador Tamarit, Julio Mariño, Guillermo Viguera, Manuel Carro. *Towards a Semantics-Aware Transformation Toolchain for Heterogeneous Systems*. Proceedings of the First International Workshop on Program Transformation for Programmability in Heterogeneous Architectures (PROHA 2016), March 2016.
16. J.F. Morales, M.V. Hermenegildo. *Pre-Indexed Terms for Prolog*. Pre-proceedings of the 24th International Symposium on Logic-Based Program Synthesis and Transformation (LOPSTR'14), 15 pages, September 2014.
17. J.F. Morales, M.V. Hermenegildo. *Towards Pre-Indexed Terms*. 14th International Colloquium on Implementation of Constraint and LOGic Programming Systems (CICLOPS-WLPE 2014), 14 pages, RWTH Aachen University, July 2014. <https://sunsite.informatik.rwth-aachen.de/Publications/AIB/2014>.
18. Z. Drey, J.F. Morales, M.V. Hermenegildo. *Reversible Language Extensions and their Application in Debugging*. 12th International Colloquium on Implementation of Constraint and LOGic Programming Systems (CICLOPS 2012), 15 pages, September 2012.
19. E.J. Gallego-Arias, R. Haemmerlé, M.V. Hermenegildo, J.F. Morales. *The Ciao CLP(FD) Library: A Modular CLP Extension for Prolog*. 12th International Colloquium on Implementation of Constraint and LOGic Programming Systems (CICLOPS 2012), 15 pages, September 2012.

20. J. F. Morales, R. Haemmerlé, M. Carro, M.V. Hermenegildo. *Lightweight compilation of (C)LP to JavaScript*. XII Jornadas sobre Programación y Lenguajes (PROLE), Universidad de Almería, 2012.
21. P. Chico de Guzmán, M. Carro, M.V. Hermenegildo, P. Stuckey. *A General Implementation Framework for Tabled CLP*. XII Jornadas sobre Programación y Lenguajes (PROLE), Universidad de Almería, 2012.
22. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *The Ciao Approach to the Dynamic vs. Static Language Dilemma*. Proceedings for the International Workshop on Scripts to Programs (STOP'11), 4 pages, ACM, 2011.
23. L. Scandolo, C. Kunz, G. Barthe, M.V. Hermenegildo. *Program Parallelization using Synchronized Pipelining*. Pre-proceedings of the 19th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'09), September 2009.
24. D. Ivanović, J.F. Morales, M. Carro, M.V. Hermenegildo. *Towards Structured State Threading in Prolog*. CICLOPS 2009, 15 pages, July 2009.
25. P. Chico de Guzmán, M. Carro, M.V. Hermenegildo. *A Program Transformation for Continuation Call-Based Tabled Execution*. Colloquium on Implementation of Constraint and Logic Programming Systems (ICLP associated workshop), 15 pages, University of Udine, December 2008.
26. P. Chico de Guzmán, M. Carro, M.V. Hermenegildo, Claudio Silva, Ricardo Rocha. *Some Improvements over the Continuation Call Tabling Implementation Technique*. Colloquium on Implementation of Constraint and Logic Programming Systems (ICLP associated workshop), 15 pages, Universidade do Porto, September 2007.
27. A. Casas, M. Carro, M.V. Hermenegildo. *Towards High-Level Execution Primitives for And-Parallelism: Preliminary Results*. Colloquium on Implementation of Constraint and Logic Programming Systems (CICLOPS'07, ICLP associated workshop), 15 pages, U. of Evora, September 2007.
28. A. Casas, M. Carro, M.V. Hermenegildo. *Towards A High-Level Implementation of Flexible Parallelism Primitives for Symbolic Languages*. Parallel Symbolic Computation (PASCO'07), 2 pages, ACM Press, July 2007. Extended Abstract.
29. M.V. Hermenegildo, The Ciao Development Team. *An Overview of The Ciao Multiparadigm Language and Program Development Environment and its Design Philosophy*. ECOOP Workshop on Multiparadigm Programming with Object-Oriented Languages MPOOL 2007, July 2007.
30. A. Casas, D. Cabeza, M.V. Hermenegildo. *Functional Notation and Lazy Evaluation in Ciao*. Colloquium on Implementation of Constraint and Logic Programming Systems (CICLOPS'05, ICLP associated workshop), pages 25–36, October 2005.
31. J. Morales, M. Carro, M.V. Hermenegildo. *Improving the Compilation of Prolog to C Using Type and Determinism Information: Preliminary Results*. Colloquium on Implementation of Constraint and Logic Programming Systems (ICLP associated workshop), pages 89–102, December 2003.
32. J. Correias, J. M. Gomez, M. Carro, D. Cabeza, M.V. Hermenegildo. *A Generic Persistence Model for CLP Systems (And Two Useful Implementations)*. Second CoLogNet Workshop on Implementation Technology for Computational Logic Systems (Formal Methods '03 Workshop), pages 51–64, Facultad de Informatica, September 2003.

33. J. Correas, F. Bueno. *A Configuration Framework for Distributed Logic Applications*. Proc. of the AGP'2002 Joint Conference on Declarative Programming, pages 123–137, Facultad de Informatica, September 2002.
34. J. Morales, M. Carro. *Improving the Compilation of Prolog to C Using Type Information: Preliminary Results*. Proceedings of the CBD 2002 / ITCLS 2002 CoLogNet Joint Workshop, pages 167–180, Facultad de Informatica, September 2002.
35. M. Carro, M.V. Hermenegildo. *A Simple Approach to Distributed Objects in Prolog*. Colloquium on Implementation of Constraint and LOGic Programming Systems (ICLP associated workshop), July 2002.
36. A. Pineda, F. Bueno. *The O'Ciao Approach to Object Oriented Logic Programming*. Colloquium on Implementation of Constraint and LOGic Programming Systems (ICLP associated workshop), July 2002.
37. J. Correas, F. Bueno. *A Configuration Framework to Develop and Deploy Distributed Logic Applications*. ICLP01 Colloquium on Implementation of Constraint and LOGic Programming Systems, 15 pages, November 2001.
38. S. Muñoz, J.J. Moreno-Navarro, M.V. Hermenegildo. *Efficient Implementation of General Negation Using Abstract Interpretation*. Proc. of the AGP'2000 Joint Conference on Declarative Programming, 15 pages, Italian Association for Logic Programming, December 2000.
39. G. Puebla, M.V. Hermenegildo. *Some Issues in Analysis and Specialization of Modular Ciao-Prolog Programs*. Special Issue on Optimization and Implementation of Declarative Programming Languages, Electronic Notes in Theoretical Computer Science, Vol. 30, Num. 2, 25 pages, Elsevier - North Holland, March 2000.
40. D. Cabeza, M.V. Hermenegildo. *The Ciao Module System: A New Module System for Prolog*. Special Issue on Parallelism and Implementation of (C)LP Systems, Electronic Notes in Theoretical Computer Science, Vol. 30, Num. 3, Elsevier - North Holland, March 2000.
41. D. Cabeza, M.V. Hermenegildo. *The Ciao Modular, Standalone Compiler and Its Generic Program Processing Library*. Special Issue on Parallelism and Implementation of (C)LP Systems, Electronic Notes in Theoretical Computer Science, Vol. 30(3), Elsevier - North Holland, March 2000.
42. I. de Castro Dutra, V. Santos Costa, G. Gupta, E. Pontelli, M. Carro, P. Kacsuk (editors). *Parallelism and Implementation Technology for (Constraint) Logic Programming*. Electronic Notes in Theoretical Computer Science, Vol. 30, Num. 2, Elsevier - North Holland, March 2000.
43. D. Cabeza, M.V. Hermenegildo. *A New Module System for Prolog*. ICLP'99 WS on Parallelism and Implementation of (C)LP Systems, pages 110–128, N.M. State U., December 1999.
44. D. Cabeza, M.V. Hermenegildo. *The Ciao Modular Compiler and Its Generic Program Processing Library*. ICLP'99 WS on Parallelism and Implementation of (C)LP Systems, pages 147–164, N.M. State U., December 1999.
45. M.V. Hermenegildo, F. Bueno, D. Cabeza, M. Carro, M. García de la Banda, P. Lopez-Garcia, G. Puebla. *The CIAO Multi-Dialect Compiler and System: A Demo and Status Report*. Proceedings of the JICSLP'96 Workshop on Parallelism and Implementation Technology, 12 pages, Computer Science Department, Technical University of Madrid, September 1996. Available from <https://www.cliplab.org/Projects/COMPULOG/meeting96/papers/PS/clip.ps.gz>.

46. D. Cabeza, M.V. Hermenegildo. *Implementing Distributed Concurrent Constraint Execution in the CIAO System*. Proc. of the AGP'96 Joint conference on Declarative Programming, pages 67–78, U. of the Basque Country, July 1996. Available from <https://www.cliplab.org/>.
47. M.V. Hermenegildo, F. Bueno, D. Cabeza, M. Carro, M. García de la Banda, P. Lopez-Garcia, G. Puebla. *The CIAO Multi-Dialect Compiler and System: An Experimentation Workbench for Future (C)LP Systems*. Proc. of the AGP'96 Joint Conference on Declarative Programming, pages 105–108, U. of the Basque Country, July 1996. Available from <ftp://www.cliplab.org/pub/papers>.
48. M.V. Hermenegildo, F. Bueno, M. García de la Banda, G. Puebla. *The CIAO Multi-Dialect Compiler and System: An Experimentation Workbench for Future (C)LP Systems*. Proceedings of the ILPS'95 Workshop on Visions for the Future of Logic Programming, December 1995. Available from <https://www.cliplab.org/>.
49. D. Cabeza, M.V. Hermenegildo. *Distributed Concurrent Constraint Execution in the CIAO System*. Proc. of the 1995 COMPULOG-NET Workshop on Parallelism and Implementation Technologies, U. Utrecht / T.U. Madrid, September 1995. Available from <https://www.cliplab.org/>.
50. M.V. Hermenegildo, The CLIP Group. *The CIAO Multiparadigm Compiler and System: A Progress Report*. Proc. of the Compulog Net Area Workshop on Parallelism and Implementation Technologies, Technical University of Madrid, September 1995.
51. M.V. Hermenegildo, D. Cabeza, M. Carro. *On The Uses of Attributed Variables in Parallel and Concurrent Logic Programming Systems*. Proc. of the 1994 COMPULOG-NET Workshop Parallelism and Implementation Technologies, 15 pages, U. of Madrid, September 1994. Also provided as attachment UPM-1 of deliverable D4.3/2.
52. D. Tang, E. Pontelli, G. Gupta, M. Carro. *Last Parallel Call Optimization and Fast Backtracking in And-parallel Logic Programming Systems*. ICLP WS on Parallel and Data Parallel Execution of Logic Programs, 14 pages, Uppsala University, CS Department, Box 311, S-751 Uppsala, Sweden, June 1994.
53. M.V. Hermenegildo, The CLIP Group. *Some Methodological Issues in the Design of CIAO - A Generic, Parallel Concurrent Constraint System*. Proc. of the 1994 ICOT/NSF Workshop on Parallel and Concurrent Programming, U. of Oregon, March 1994.
54. M.V. Hermenegildo, The CLIP Group. *Towards CIAO-Prolog - A Parallel Concurrent Constraint System*. Proc. of the Compulog Net Area Workshop on Parallelism and Implementation Technologies, 10 pages, FIM/UPM, Madrid, Spain, June 1993.
55. G. Gupta, M.V. Hermenegildo, V. Santos-Costa. *Generalized Stack Copying for And-Or Parallel Implementations*. JICSLP'92 Workshop on Parallel Execution, 15 pages, 1992.
56. G. Gupta, M.V. Hermenegildo. *ACE: And/Or-parallel Copying-based Execution of Logic Programs*. ICLP '91 Workshop on Parallel Execution of Logic Programs, LNCS, Num. 569, pages 146–159, Springer-Verlag, December 1991.
57. M.V. Hermenegildo, M. Carro. *Experimenting with Independent And-Parallel Prolog using Standard Prolog*. Jornadas Nacionales de Programación Declarativa, pages 478–497, U. Malaga, October 1991.

Technical Reports and Manuals:

1. G. Garcia-Pradales, J.F. Morales, M.V. Hermenegildo. *The Ciao Prolog Playground*. Technical University of Madrid (UPM) and IMDEA Software Institute, 2021.

2. I. Garcia-Contreras, J. F. Morales, M.V. Hermenegildo. *An Approach to Incremental and Modular Context-sensitive Analysis of Logic Programs*. Num. CLIP-2/2018.0, 28 pages, The CLIP Lab, IMDEA Software Institute and T.U. Madrid, April 2018.
3. M. Klemen, N. Stulova, P. Lopez-Garcia, J. F. Morales, M.V. Hermenegildo. *An Approach to Static Performance Guarantees for Programs with Run-time Checks*. Num. CLIP-1/2018.0, 15 pages, The CLIP Lab, IMDEA Software Institute and T.U. Madrid, April 2018.
4. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Term Hiding and its Impact on Run-time Check Simplification*. Num. CLIP-1/2017.0, 27 pages, The CLIP Lab, May 2017. CoRR abs/1705.06662 (v2) [cs.PL].
5. Guillermo Viguera, Salvador Tamarit, Manuel Carro, Julio Mariño. *Towards a Rule-Based Approach to Generate High-Performance Scientific Code*. Num. CLIP1/2015.0, 8 pages, The CLIP Lab, March 2015. <https://cliplab.org/papers/viguera15-rule-based.pdf>.
6. P. Lopez-Garcia, L. Darmawan, F. Bueno, M.V. Hermenegildo. *Towards Resource Usage Function Verification based on Input Data Size Intervals*. Num. CLIP4/2011.0, Technical University of Madrid (UPM), April 2011. Available at <https://cliplab.org/papers/resource-verif-11-tr.pdf>.
7. P. Chico de Guzmán, A. Casas, M. Carro, M.V. Hermenegildo. *A Simulation Study on Parallel Backtracking with Solution Memoing for Independent And-Parallelism*. Num. CLIP1/2011.0, 12 pages, Technical University of Madrid (UPM), January 2011.
8. J.F. Morales, M.V. Hermenegildo, R. Haemmerlé. *Towards Modular Extensions for a Modular Language*. Num. CLIP2/2011.0, 15 pages, Technical University of Madrid (UPM), January 2011.
9. E. Mera, T. Trigo, P. Lopez-Garcia, M.V. Hermenegildo. *An Approach to Profiling for Run-Time Checking of Computational Properties and Performance Debugging*. Num. CLIP3/2010.0, 29 pages, Technical University of Madrid (UPM), March 2010.
10. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *An Overview of Ciao and its Design Philosophy*. Num. CLIP2/2010.0, Technical University of Madrid (UPM), March 2010. Under consideration for publication in *Theory and Practice of Logic Programming (TPLP)*.
11. P. Lopez-Garcia, L. Darmawan, F. Bueno, M.V. Hermenegildo. *Towards a Framework for Resource Usage Verification and Debugging in the CiaoPP System*. Num. CLIP1/2010.0, Technical University of Madrid (UPM), February 2010. Available at <https://cliplab.org/papers/resource-verif-10-tr.pdf>.
12. J.F. Morales, M. Carro, M.V. Hermenegildo. *Description and Optimization of Abstract Machines in a Dialect of Prolog*. Num. CLIP4/2009.0, Technical University of Madrid (UPM), October 2009.
13. P. Lopez-Garcia, F. Bueno, M.V. Hermenegildo. *Inferring Determinacy and Mutual Exclusion in Logic Programs Using Mode and Type Analysis*. Num. CLIP2/2009.0, Technical University of Madrid (UPM), February 2009.
14. P. Chico de Guzmán, M. Carro, M.V. Hermenegildo. *Bridge Program Transformation for the CCall Tabling Scheme*. Num. CLIP6/2008.0, Technical University of Madrid (UPM), September 2008.
15. A. Casas, M. Carro, M.V. Hermenegildo. *A High-Level Implementation of Non-Deterministic, Unrestricted, Independent And-Parallelism*. Num. TR-CS-2008-10, University of New Mexico (UNM), September 2008.

16. P. Chico de Guzmán, M. Carro, M.V. Hermenegildo. *An Improved Continuation Call-Based Implementation of Tabling*. Num. CLIP9/2007.0, Technical University of Madrid (UPM), August 2007.
17. A. Casas, M. Carro, M.V. Hermenegildo. *Towards a High-Level Implementation of Execution Primitives for Non-Restricted, Independent And-Parallelism*. Num. CLIP7/2007.0, Technical University of Madrid (UPM), August 2007.
18. P. Lopez-Garcia, F. Bueno, M.V. Hermenegildo. *Inferring Determinacy in Logic Programs Using Mode and Type Information*. Num. CLIP3/2007.0, Technical University of Madrid (UPM), February 2007.
19. J. Morales, M. Carro, M.V. Hermenegildo. *Description and Optimization of Abstract Machines in an Extension of Prolog*. Num. CLIP8/2006.0, 43 pages, Technical University of Madrid (UPM), December 2006.
20. M.V. Hermenegildo, The Ciao Development Team. *Why Ciao? –An Overview of the Ciao System’s Design Philosophy*. Num. CLIP7/2006.0, 6 pages, Technical University of Madrid (UPM), December 2006. Available from: <https://cliplab.org/papers/ciao-philosophy-note-tr.pdf>.
21. A. Kostenko, M. Carro. *A Preliminary DHT Infrastructure for Ciao*. Num. CLIP12/2006.0, Technical University of Madrid (UPM), August 2006.
22. M. Carro, J. Morales, H.L. Muller, G. Puebla, M.V. Hermenegildo. *Optimizing Prolog for Small Devices: A Case Study*. Num. CLIP4/2006.0, 16 pages, Technical University of Madrid, April 2006. Under consideration for publication.
23. A. Casas, D. Cabeza, M.V. Hermenegildo. *A Syntactic Approach to Combining Functional Notation, Lazy Evaluation and Higher-Order in LP Systems*. Num. TR-CS-2006-07, 17 pages, University of New Mexico (UNM), 2006.
24. J. Morales, M. Carro, G. Puebla, M.V. Hermenegildo. *A Generator of Efficient Abstract Machine Implementations and its Application to Emulator Minimization*. Num. CLIP3/2005.0, 21 pages, Technical University of Madrid (UPM), May 2005.
25. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla (Eds.). *The Ciao System. Reference Manual (V1.10)*. School of Computer Science, Technical University of Madrid (UPM), June 2004. System and on-line version of the manual available at <https://ciao-lang.org>.
26. J. Morales, M. Carro, M.V. Hermenegildo. *Improving the Compilation of Prolog to C Using Moded Types and Determinism Information*. Num. CLIP5/2004.0, Technical University of Madrid, April 2004.
27. Pattengale, N. D.. *Transactional Semantics*. Num. CLIP3/04.0, 24 pages, Technical University of Madrid (UPM), February 2004.
28. J. Navas, D. Cabeza, M.V. Hermenegildo. *CoLogNetWS: Development of a Web Site with Database Multinode Distributed Update*. Num. CLIP6/2003.0, 157 pages, CoLogNet Project, November 2003.
29. David Trallero Mena. *Local and Global Multiattributed Variables*. Num. CLIP10/03.0, Facultad de Informática, UPM, Technical University of Madrid (UPM), 2003.
30. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.8)*. Num. CLIP4/2002.1, School of Computer Science, Technical University of Madrid (UPM), May 2002. System and on-line version of the manual available at <https://ciao-lang.org>.

31. F. Bueno, J. Correas. *Active Module Service*. Num. CLIP4/2001.1, Facultad de Informática, UPM, Technical University of Madrid (UPM), 2001.
32. M. Carro, M.V. Hermenegildo. *Remote Execution and Mobile Objects in Ciao Prolog*. Num. CLIP3/2001.1, Facultad de Informática, UPM, Technical University of Madrid (UPM), 2001.
33. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.6)*. Num. CLIP5/2000.1, School of Computer Science, Technical University of Madrid (UPM), July 2000. System and on-line version of the manual available at <https://ciao-lang.org>.
34. J. Correas. *A Low-Level Bidirectional Prolog / Java Interface: Design and Prolog API*. Num. CLIP1/2000.1, 50 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), 2000.
35. J. Correas. *A Low-Level Bidirectional Prolog / Java Interface: Java API*. Num. CLIP2/2000.1, 80 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), 2000.
36. J. Correas. *An Object Oriented Bidirectional Prolog to Java Interface*. Num. CLIP3/2000.1, 30 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), 2000.
37. M.V. Hermenegildo, D. Cabeza, M. Rodriguez. *Using Ciao inside GNU Emacs*. Num. CLIP4/2000.1, 18 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), 2000.
38. D. Cabeza, M.V. Hermenegildo. *Higher-order Logic Programming in Ciao*. Num. CLIP7/99.0, 15 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), September 1999.
39. D. Cabeza, M.V. Hermenegildo. *A New Module System for Prolog*. Num. CLIP8/99.0, 15 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), September 1999.
40. D. Cabeza, M.V. Hermenegildo. *The Ciao Modular Compiler and Its Generic Program Processing Library*. Num. CLIP9/99.0, 15 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), September 1999.
41. A. Pineda. *Object Oriented Programming Library (O'Ciao)*. Num. CLIP 6/99.0, Facultad de Informática, UPM, July 1999.
42. A. Pineda, M.V. Hermenegildo. *O'Ciao: An Object Oriented Programming Model for (CIAO) Prolog*. Num. CLIP 5/99.0, Facultad de Informática, UPM, July 1999.
43. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.0)*. Num. CLIP11/99.1, School of Computer Science, Technical University of Madrid (UPM), June 1999. System and on-line version of the manual available at <https://ciao-lang.org>.
44. D. Cabeza, S. Genaim, C. Taboch. *WOF Interpreter and GDA Installation Guide and Demo*. Num. D3.1.M2-A4, 10 pages, RADIOWEB Project, December 1998.
45. J.M. Gomez, D. Cabeza, M.V. Hermenegildo. *persdb: Persistent Database Interface*. Num. CLIP9/98.0, 24 pages, December 1998.
46. I. Caballero, D. Cabeza, S. Genaim, J.M. Gomez, M.V. Hermenegildo. *persdb_sql: SQL Persistent Database Interface*. Num. CLIP10/98.0, 39 pages, December 1998.
47. J.M. Gomez, D. Cabeza, M.V. Hermenegildo. *WebDB: A Database WWW Interface*. Num. CLIP11/98.0, 32 pages, December 1998.

48. D. Cabeza, M.V. Hermenegildo, S. Genaim, C. Taboch. *Design of a Generic, Homogeneous Interface to Relational Databases*. Num. D3.1.M1-A1, CLIP7/98.0, 10 pages, September 1998.
49. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V0.6)*. Num. CLIP12/98.1, School of Computer Science, Technical University of Madrid (UPM), July 1998. System and on-line version of the manual available at <https://ciao-lang.org>.
50. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual*. Num. CLIP3/97.1, School of Computer Science, Technical University of Madrid (UPM), August 1997. System and on-line version of the manual available at <https://ciao-lang.org>.
51. F. Bueno, S. K. Debray, M. García de la Banda, M.V. Hermenegildo. *QE-Andorra: A Quiche-Eating Implementation of the Basic Andorra Model*. Num. CLIP05/96.0, T.U. of Madrid (UPM), February 1996.
52. F. Bueno, M.V. Hermenegildo. *Compiling Concurrency into a Sequential Logic Language*. Num. CLIP15/95.0, Facultad de Informática, UPM, June 1995.
53. E. Pontelli, G. Gupta, D. Tang, M.V. Hermenegildo, M. Carro. *Efficient Implementation of And-parallel Prolog Systems*. Num. CLIP4/95.0, T.U. of Madrid (UPM), June 1995.
54. F. Bueno, M.V. Hermenegildo. *An Automatic Translation Scheme from CLP to AKL*. Facultad de Informática, UPM, June 1995.
55. F. Bueno, S. K. Debray, M. García de la Banda, M.V. Hermenegildo. *Transformation-based Implementation and Optimization of Programs Exploiting the Basic Andorra Model*. Num. CLIP11/95.0, ACCLAIM Deliverable D3.3/4-A1, Facultad de Informática, UPM, May 1995.
56. M. García de la Banda, M.V. Hermenegildo, K. Marriott. *Independence in Dynamically Scheduled Languages*. Num. CLIP12/94.0, T. University of Madrid (UPM), September 1994. Presented at the ICLP'93 Post Conference Workshop on Concurrent Constraint Logic Programming.
57. F. Bueno, S. K. Debray, M. García de la Banda, M.V. Hermenegildo. *QE-Andorra: A Quiche-Eating Implementation of the Basic Andorra Model*. Num. CLIP13/94.0, T.U. of Madrid (UPM), September 1994.
58. F. Bueno, F. Rossi, M.V. Hermenegildo. *Concurrent Semantics Based Optimizations of cc and CLP*. Num. CLIP2/93.2, T.U. of Madrid (UPM), September 1994.
59. M.V. Hermenegildo, D. Cabeza, M. Carro. *On The Uses of Attributed Variables in Parallel and Concurrent Logic Programming Systems*. Num. CLIP 5/94.0, 17 pages, School of Computer Science, Technical University of Madrid (UPM), June 1994. Presented at the ILPS'94 Post Conference Workshop on Design and Implementation of Parallel Logic Programming Systems, Available from <https://www.cliplab.org/>.
60. K. Shen, M.V. Hermenegildo. *A Flexible Scheduling and Memory Management Scheme for Non-Deterministic, And-parallel Execution*. Num. CLIP6/94.0, T.U. of Madrid (UPM), June 1994.
61. M.V. Hermenegildo. *A Simple, Distributed Version of the \mathcal{E} -Prolog System*. School of Computer Science, Technical University of Madrid (UPM), April 1994. Available from <https://www.cliplab.org/>.

62. F. Bueno, M. García de la Banda, M.V. Hermenegildo. *Compile-time Optimizations and Analysis Requirements for CC Programs*. Num. CLIP6/93.0, T.U. of Madrid (UPM), July 1993.
63. F. Bueno, M. García de la Banda, D. Cabeza, M.V. Hermenegildo. *The \mathcal{E} -Prolog Compiler System — Automatic Parallelization Tools for LP*. Num. CLIP5/93.0, Computer Science Dept., Technical U. of Madrid (UPM), June 1993.
64. K. Shen, M.V. Hermenegildo. *A Flexible Scheduling and Memory Management Scheme for Non-Deterministic, And-parallel Execution of Logic Programs*. Num. CLIP 4/93.0, T.U. of Madrid (UPM), April 1993. Presented at the ICLP'93 Post Conference Workshop on Logic Program Implementation.
65. G. Gupta, M.V. Hermenegildo, E. Pontelli, V. Santos-Costa. *ACE: And/Or-parallel Copying-based Execution of Logic Programs*. New Mexico State University, Computer Science Dept., 1993.
66. G. Gupta, M.V. Hermenegildo, E. Pontelli, V. Santos-Costa. *ACE: And/Or-parallel Copying-based Execution of Logic Programs*. Num. CLIP7/92.0, U. of Madrid (UPM) and New Mexico S.U., November 1992.
67. M.V. Hermenegildo, M. Carro. *Experimenting with Independent And-Parallel Prolog using Standard Prolog*. 24 pages, U. of Madrid (UPM), October 1991. Presented at the 1991 Spanish Workshop on Declarative Programming, Malaga.
68. M. Olmedilla, F. Bueno, M.V. Hermenegildo. *Automatic Exploitation of Non-Determinate Independent And-Parallelism in the Basic Andorra Model*. Num. FIM106.1/AI/91, Facultad de Informatica, U. P. Madrid, Spain, October 1991.
69. G. Gupta, M.V. Hermenegildo. *ACE: And/Or-parallel Copying-based Execution of Logic Programs*. Num. without, T.U. of Madrid (UPM), June 1991. also in Proc. ICLP91 Workshop on Parallel Execution of Logic Programs.
70. G. Gupta, V. Santos-Costa, R. Yang, M.V. Hermenegildo. *IDIOM: A Model Intergrating Dependent-, Independent-, and Or-parallelism*. Num. CLIP8/91.0, University of Bristol, March 1991.
71. M.V. Hermenegildo, K. Greene. *\mathcal{E} -Prolog and its Performance: Exploiting Independent And-Parallelism*. Num. ACA-ST-536-89, MCC, Austin, TX 78759, November 1989.
72. M.V. Hermenegildo, F. Rossi. *Strict and Non-Strict Independent And-Parallelism in Logic Programs: Correctness, Efficiency, and Compile-Time Conditions*. Num. ACA-ST-537-89, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, November 1989.
73. M.V. Hermenegildo, K. Muthukumar, K. Greene, F. Rossi, R. I. Nasr. *An Overview of the PAL Project*. Num. ACT-ST-234-89, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, September 1989.
74. K. Muthukumar, M.V. Hermenegildo. *Efficient Methods for Supporting Side Effects in Independent And-parallelism and Their Backtracking Semantics*. Num. ACA-ST-031-89, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, January 1989.
75. M.V. Hermenegildo, E. Tick. *Memory Performance of AND-Parallel Prolog on Shared-Memory Architectures*. Num. ACA-ST-036-88, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, January 1988.

76. M.V. Hermenegildo, E. Tick. *Performance Evaluation of the RAP-WAM Restricted AND-Parallel Architecture on Shared Memory Multiprocessors*. Num. PP-085-87, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, March 1987.
77. R. Warren, M.V. Hermenegildo. *Experimenting with Prolog: An Overview*. Num. ACA/PP 43, Microelectronics and Computer Technology Corporation (MCC), 3500 W. Balcones Center Dr. Austin, TX 78759, March 1987.
78. M.V. Hermenegildo. *Relating Goal Scheduling, Precedence, and Memory Management in AND-Parallel Execution of Logic Programs*. Num. PP-408-86, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, December 1986.
79. M.V. Hermenegildo, G. J. Lipovski, R. Warren. *Goal Scheduling and Memory Management in Parallel Logic Systems*. Num. PP-083-86, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, March 1986.
80. M.V. Hermenegildo. *A Restricted AND-parallel Execution Model and Abstract Machine for Prolog Programs*. Num. PP-104-85, Microelectronics and Computer Technology Corporation (MCC), Austin, TX 78759, October 1985.

16 Publications in Environments and Tools for Software Development

Articles in Refereed Journals:

1. Louis Rustenholz, Maximiliano Klemen, Miguel Ángel Carreira-Perpiñán, Pedro López-García. *A Machine Learning-based Approach for Solving Recurrence Relations and its use in Cost Analysis of Logic Programs*. TPLP, Vol. 24, Num. 6, pages 1163–1207, November 2024.
2. Joaquín Arias, Seppo Törmä, Manuel Carro, Gopal Gupta. *Building Information Modeling Using Constraint Logic Programming*. Theory and Practice of Logic Programming, Vol. 22, Num. 5, pages 723–738, 2022.
3. I. Garcia-Contreras, J. F. Morales, M.V. Hermenegildo. *Incremental and Modular Context-sensitive Analysis*. Theory and Practice of Logic Programming, Vol. 21, Num. 2, pages 196–243, Cambridge U. Press, January 2021.
4. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Some Trade-offs in Reducing the Overhead of Assertion Run-time Checks via Static Analysis*. Science of Computer Programming, Vol. 155, pages 3–26, Elsevier North-Holland, April 2018. Selected and Extended papers from the 2016 International Symposium on Principles and Practice of Declarative Programming.
5. P. Lopez-Garcia, L. Darmawan, M. Klemen, U. Liqat, F. Bueno, M.V. Hermenegildo. *Interval-based Resource Usage Verification by Translation into Horn Clauses and an Application to Energy Consumption*. Theory and Practice of Logic Programming, Special Issue on Computational Logic for Verification, Vol. 18, Num. 2, pages 167–223, Cambridge U. Press, March 2018. arXiv:1803.04451.
6. I. Garcia-Contreras, J. F. Morales, M.V. Hermenegildo. *Semantic Code Browsing*. Theory and Practice of Logic Programming, 32nd Int'l. Conference on Logic Programming (ICLP'16) Special Issue, Vol. 16, Num. 5-6, pages 721–737, Cambridge U. Press, September 2016.
7. P. Lopez-Garcia, M. Klemen, U. Liqat, M.V. Hermenegildo. *A General Framework for Static Profiling of Parametric Resource Usage*. Theory and Practice of Logic Programming, 32nd Int'l. Conference on Logic Programming (ICLP'16) Special Issue, Vol. 16, Num. 5-6, pages 849–865, Cambridge U. Press, September 2016.
8. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Practical Run-time Checking via Unobtrusive Property Caching*. Theory and Practice of Logic Programming, 31st Int'l. Conference on Logic Programming (ICLP'15) Special Issue, Vol. 15, Num. 04-05, pages 726–741, Cambridge U. Press, September 2015. <https://arxiv.org/abs/1507.05986>.
9. A. Serrano, P. Lopez-Garcia, M.V. Hermenegildo. *Resource Usage Analysis of Logic Programs via Abstract Interpretation Using Sized Types*. Theory and Practice of Logic Programming, 30th Int'l. Conference on Logic Programming (ICLP'14) Special Issue, Vol. 14, Num. 4-5, pages 739–754, Cambridge U. Press, July 2014.
10. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *An Overview of Ciao and its Design Philosophy*. Theory and Practice of Logic Programming, Vol. 12, Num. 1–2, pages 219–252, Cambridge University Press, January 2012.
11. M.V. Hermenegildo, G. Puebla, F. Bueno, P. Lopez-Garcia. *Integrated Program Debugging, Verification, and Optimization Using Abstract Interpretation (and The Ciao System Preprocessor)*. Science of Computer Programming, Vol. 58, Num. 1–2, pages 115–140, Elsevier North-Holland, October 2005.

Articles in Refereed Conferences:

1. Louis Rustenholz, Pedro Lopez-Garcia, José F. Morales, Manuel V. Hermenegildo. *An Order Theory Framework of Recurrence Equations for Static Cost Analysis - Dynamic Inference of Non-Linear Inequality Invariants*. Proceedings of the 31st Static Analysis Symposium (SAS 2024), LNCS, Vol. 14995, pages 352–385, Springer, October 2024.
2. I. Casso, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *An Integrated Approach to Assertion-Based Random Testing in Prolog*. Post-Proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), LNCS, Vol. 12042, pages 159–176, Springer-Verlag, April 2020.
3. M. Klemen, P. Lopez-Garcia, J. Gallagher, J.F. Morales, M.V. Hermenegildo. *A General Framework for Static Cost Analysis of Parallel Logic Programs*. Post-Proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), LNCS, Vol. 12042, pages 19–35, Springer-Verlag, April 2020.
4. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Incremental Analysis of Logic Programs with Assertions and Open Predicates*. Proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), LNCS, Vol. 12042, pages 36–56, Springer, 2020.
5. U. Liqat, Z. Banković, P. Lopez-Garcia, M.V. Hermenegildo. *Inferring Energy Bounds via Static Program Analysis and Evolutionary Modeling of Basic Blocks*. Logic-Based Program Synthesis and Transformation - 27th International Symposium, LOPSTR 2017, Namur, Belgium, October 10-12, 2017, Revised Selected Papers, Lecture Notes in Computer Science, Vol. 10855, Springer, 2018.
6. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Reducing the Overhead of Assertion Runtime Checks via Static Analysis*. 18th Int'l. ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming (PPDP'16), pages 90–103, ACM Press, September 2016.
7. R. Haemmerlé. *On Combining Backward and Forward Chaining in Constraint Logic Programming*. 16th Int'l. ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming (PPDP'14), 12 pages, ACM Press, September 2014.
8. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Assertion-based Debugging of Higher-Order (C)LP Programs*. 16th Int'l. ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming (PPDP'14), pages 225–235, ACM Press, September 2014.
9. U. Liqat, S. Kerrison, A. Serrano, K. Georgiou, P. Lopez-Garcia, N. Grech, M.V. Hermenegildo, K. Eder. *Energy Consumption Analysis of Programs based on X MOS ISA-Level Models*. Logic-Based Program Synthesis and Transformation, 23rd International Symposium, LOPSTR 2013, Revised Selected Papers, Lecture Notes in Computer Science, Vol. 8901, pages 72–90, Springer, 2014.
10. A. Serrano, P. Lopez-Garcia, F. Bueno, M.V. Hermenegildo. *Sized Type Analysis for Logic Programs*. Vol. 13, Num. 4-5, pages 1–14, Cambridge U. Press, August 2013.
11. Z. Drey, J. F. Morales, M.V. Hermenegildo, M. Carro. *Reversible Language Extensions and their Application in Debugging*. Practical Aspects of Declarative Languages (PADL'13), LNCS, Vol. 7752, Springer, January 2013.
12. E. Albert, P. Arenas, M. Gómez-Zamalloa. *Symbolic Execution of Concurrent Objects in CLP*. Practical Aspects of Declarative Languages (PADL'12), LNCS, Vol. 7149, pages 123–137, Springer, January 2012.

13. E. Mera, T. Trigo, P. Lopez-Garcia, M.V. Hermenegildo. *Profiling for Run-Time Checking of Computational Properties and Performance Debugging in Logic Programs*. Practical Aspects of Declarative Languages (PADL'11), Lecture Notes in Computer Science, Vol. 6539, pages 38–53, Springer-Verlag, January 2011.
14. P. Lopez-Garcia, L. Darmawan, F. Bueno. *A Framework for Verification and Debugging of Resource Usage Properties: Resource Usage Verification*. Technical Communications of the 26th Int'l. Conference on Logic Programming (ICLP'10), Leibniz International Proceedings in Informatics (LIPIcs), Vol. 7, pages 104–113, Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, July 2010.
15. E. Mera, P. Lopez-Garcia, M.V. Hermenegildo. *Integrating Software Testing and Run-Time Checking in an Assertion Verification Framework*. 25th Int'l. Conference on Logic Programming (ICLP'09), LNCS, Vol. 5649, pages 281–295, Springer-Verlag, July 2009.

Books and Monographs:

1. Cicalà Baztán, Marco. *Improvements in Ciao Prolog's Development Environment: Developing A Rich Development Environment for Ciao on Visual Studio Code*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 74 pages, June 2024. BSc Thesis.
2. David S. Warren, Veronica Dahl, Thomas Eiter, Manuel V. Hermenegildo, Robert Kowalski, Francesca Rossi. *Prolog - The Next 50 Years*. LNCS, Num. 13900, Springer, July 2023.
3. Ferreiro de Aguiar, Daniela. *A System for generating interactive tutorials for CiaoPP*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 57 pages, February 2023. MSc Thesis.
4. Ferreiro de Aguiar, Daniela. *Automatic Analysis of Code Examples*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 66 pages, July 2021. BSc Thesis.
5. I. Garcia-Contreras. *A Scalable Static Analysis Framework for Reliable Program Development Exploiting Incrementality and Modularity*. Ph.D. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 42 pages, July 2021. Advisors: M.V. Hermenegildo and Jose F. Morales.
6. Jurjo Rivas, Daniel. *Abstract Domain for Floating-point Programs*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 58 pages, July 2021. MSc Thesis.
7. Pérez Carrasco, Víctor. *Improvements to Parametric Cost Analysis and its Application to Smart Contracts*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 63 pages, July 2021. MSc Thesis.
8. Maximiliano Klemen. *A General Framework for Static Resource Analysis and Profiling of (Parallel) Programs and an Application to Runtime Checking*. Ph.D. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, March 2021.
9. Pérez Carrasco, Víctor. *Analysis of Smart Contracts using Horn Clauses*. Ms. Thesis, Universidad Politécnica de Madrid, ETSIInf, E-28660, Boadilla del Monte, Madrid, Spain, 76 pages, June 2020. BSc Thesis.
10. M. Klemen. *Improved Static Analysis and Verification of Energy Consumption and other Resources via Abstract Interpretation*. Ms. Thesis, Technical University of Madrid, ETSI-Informatica, E-28660, Boadilla del Monte, Madrid, Spain, 88 pages, July 2015.

11. E. Mera. *A Unified Framework for Resource and Execution Time Analysis, Run-Time Checking and Unit-Testing*. Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informática UPM, 28660-Boadilla del Monte, Madrid-Spain, November 2010.
12. Susana Muñoz, José M. Gómez, Petra Hofstedt. *Proceedings of WLPE 2004*. 131 pages, INSA Rennes, September 2004.

Invited Papers and Tutorials:

1. M.V. Hermenegildo, J.F. Morales, P. Lopez-Garcia. *How to Best Teach Prolog*. July 2023. Invited talk at ICLP Special Session: Teaching Prolog: the Next 50 Years and Prolog Education Group. Video at the LP Education group.
2. M.V. Hermenegildo. *50-Years of Prolog and Beyond (invited talk)*. November 2022. Keynote given at the Prolog 50th Anniversary ‘Prolog Day Symposium’.
3. M.V. Hermenegildo. *Some reflections on Prolog’s evolution, status, and future on the 50th anniversary of the birth of Prolog (abstract of invited talk)*. 38th International Conference on Logic Programming (ICLP’22 at FLoC’22), August 2022.
4. M.V. Hermenegildo, P. Lopez-Garcia, J.F. Morales, V. Perez-Carrasco. *Analysis and Verification of the Resource Consumption of Tezos Contracts*. March 2022. Nomadic Labs Research Seminars #28.
5. M.V. Hermenegildo, I. Garcia-Contreras, J. Morales, P. Lopez-Garcia, M. Klemen, I. Casso. *Multivariate Assertion-based Guidance of Top-down Horn Clause-based Analysis in CiaoPP*. Workshop on Declarative Program Analysis (DPA 2019), 1 pages, July 2019. (Abstract of invited talk). Associated to FCRC 2019.
6. M.V. Hermenegildo, M. Carro, P. Lopez-Garcia, J.F. Morales, J. Arias, I. Garcia-Contreras, M. Klemen, N. Stulova. *25 Years of Ciao (abstract of invited tutorial)*. Pre-proceedings of the 28th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR’18), September 2018. Talk slides at https://cliplab.org/papers/ciao_tut_lopstr18.pdf.
7. M.V. Hermenegildo, P. Lopez-Garcia, J. Morales, I. Garcia-Contreras, M. Klemen, N. Stulova. *Horn Clause-based Program Analysis and Verification with CiaoPP*. 1st International Workshop on Declarative Program Analysis (DPA 2018), 1 pages, July 2018. (Abstract of invited talk). Associated to ECOOP/ISSTA 2018.
8. M.V. Hermenegildo, P. Lopez-Garcia, U. Liqat, M. Klemen. *Energy Consumption Analysis and Verification by Transformation into Horn Clauses and Abstract Interpretation*. 5th International Workshop on Verification and Program Transformation (VPT 2017), Vol. 253, pages 4–6, EPTCS, April 2017. (Abstract of invited talk).
9. M.V. Hermenegildo, G. Puebla, F. Bueno, P. Lopez-Garcia. *Program Development Using Abstract Interpretation (and The Ciao System Preprocessor)*. 10th International Static Analysis Symposium (SAS’03), LNCS, Num. 2694, pages 127–152, Springer-Verlag, June 2003.

Articles in Books and Other Collections:

1. Gopal Gupta, Elmer Salazar, Joaquín Arias, Kinjal Basu, S Varanasi, M Carro. *Prolog: Past, Present, and Future*. Prolog - The Next 50 Years, LNCS, Num. 13900, Springer, July 2023.

2. M.V. Hermenegildo, J.F. Morales, P. Lopez-Garcia, M. Carro. *Types, modes and so much more – the Prolog way*. Prolog - The Next 50 Years, LNCS, Num. 13900, pages 23–37, Springer, July 2023.
3. J.F. Morales, S. Abreu, D. Ferreira, M.V. Hermenegildo. *Teaching Prolog with Active Logic Documents*. Prolog - The Next 50 Years, LNCS, Num. 13900, pages 171–183, Springer, July 2023.
4. M.V. Hermenegildo, J.F. Morales, P. Lopez-Garcia. *Some Thoughts on How to Teach Prolog*. Prolog - The Next 50 Years, LNCS, Num. 13900, pages 107–123, Springer, July 2023.
5. P. Lopez-Garcia, M.V. Hermenegildo, M. Klemen, U. Liqat. *Energy Consumption Analysis and Verification using CiaoPP*. The ALP Newsletter, Vol. 30, Num. 3, The Association for Logic Programming, September 2017.
6. K. Georgiou, U. Liqat. *Towards LLVM-Based Energy Consumption Analysis of Programs*. ICT-Energy (Nanoenergy) Letters, Num. 8, pages 16–17, July 2014.
7. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, J.F. Morales, G. Puebla. *An Overview of The Ciao Multiparadigm Language and Program Development Environment and its Design Philosophy*. Festschrift for Ugo Montanari, LNCS, Vol. 5065, pages 209–237, Springer-Verlag, June 2008.

Publications in Refereed Workshops:

1. Manuel V. Hermenegildo, José F. Morales, Pedro Lopez-Garcia. *Teaching Pure LP with Prolog and a Fair Search Rule*. Proceedings of the 40th ICLP Workshops, Vol. 3799, CEUR-WS.org, October 2024.
2. M. Klemen, M.Á. Carreira-Perpiñán, P. Lopez-Garcia. *Solving Recurrence Relations using Machine Learning, with Application to Cost Analysis*. Technical Communications of the 39th International Conference on Logic Programming (ICLP 2023), Electronic Proceedings in Theoretical Computer Science (EPTCS), Vol. 385, pages 155–168, Open Publishing Association (OPA), July 2023.
3. D. Jurjo, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *Towards a rule-based approach for deriving abstract domains*. Technical Communications of the 39th International Conference on Logic Programming (ICLP 2023), Electronic Proceedings in Theoretical Computer Science (EPTCS), Vol. 385, pages 55–58, Open Publishing Association (OPA), July 2023. (Extended Abstract).
4. D. Ferreira, J.F. Morales, S. Abreu, M.V. Hermenegildo. *Demonstrating (Hybrid) Active Logic Documents and the Ciao Prolog Playground, and an Application to Verification Tutorials*. Technical Communications of the 39th International Conference on Logic Programming (ICLP 2023), Electronic Proceedings in Theoretical Computer Science (EPTCS), Vol. 385, pages 324–330, Open Publishing Association (OPA), July 2023. See also associated poster at <https://cliplab.org/papers/hald-poster-iclp.pdf>.
5. G. Garcia-Pradales, J.F. Morales, M.V. Hermenegildo, J. Arias, M. Carro. *An s(CASP) In-Browser Playground based on Ciao Prolog*. Proceedings of the 38th ICLP Workshops - Goal-directed Execution of Answer Set Programs, Vol. 3193, CEUR-WS.org, August 2022.
6. M. A. Sanchez-Ordaz, I. Garcia-Contreras, V. Perez-Carrasco, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *VeriFly: On-the-fly Assertion Checking with CiaoPP*. 6th Workshop on Formal Integrated Development Environment (F-IDE 2021, part of NASA NFM'21), Electronic Proceedings in Theoretical Computer Science (EPTCS), pages 1–5, Open Publishing Association (OPA), May 2021. Co-located with ETAPS 2021.

7. I. Garcia-Contreras, J. F. Morales, M.V. Hermenegildo. *Incremental and Modular Context-sensitive Analysis*. Workshop on Horn Clauses for Verification and Synthesis (HCVS 2021), March 2021. (Talk).
8. Joaquín Arias, Gopal Gupta, Manuel Carro. *A Short Tutorial on s(CASP), a Goal-directed Execution of Constraint Answer Set Programs*. Proceedings of the 37th ICLP 2021 Workshops, Vol. 2970, CEUR-WS.org, 2021.
9. I. Casso, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *An Integrated Approach to Assertion-Based Random Testing in Prolog*. Pre-proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), November 2019.
10. M. Klemen, P. Lopez-Garcia, J. Gallagher, J.F. Morales, M.V. Hermenegildo. *A General Framework for Static Cost Analysis of Parallel Logic Programs*. Pre-proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), November 2019.
11. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Experiments in Context-Sensitive Incremental and Modular Static Analysis in CiaoPP*. 10th Workshop on Tools for Automatic Program Analysis (TAPAS'19), October 2019. (Extended Abstract).
12. I. Garcia-Contreras, J.F. Morales, M.V. Hermenegildo. *Incremental Analysis of Logic Programs with Assertions and Open Predicates*. Pre-proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), October 2019.
13. P. Lopez-Garcia, M. Klemen, U. Liqat, M.V. Hermenegildo. *A General Framework for Static Profiling of Parametric Resource Usage (extended abstract)*. 19th International Workshop on Logic and Computational Complexity (LCC 2018), 4 pages, July 2018. Associated to FLOC 2018.
14. I. Garcia-Contreras, J. F. Morales, M.V. Hermenegildo. *Towards Incremental and Modular Context-sensitive Analysis*. Technical Communications of the 34th International Conference on Logic Programming (ICLP 2018), OpenAccess Series in Informatics (OASICs), 2 pages, Dagstuhl Press, July 2018. (Extended Abstract).
15. M. Klemen, N. Stulova, P. Lopez-Garcia, J. F. Morales, M.V. Hermenegildo. *Towards Static Performance Guarantees for Programs with Run-time Checks*. Technical Communications of the 34th International Conference on Logic Programming (ICLP 2018), OpenAccess Series in Informatics (OASICs), 2 pages, July 2018. (Extended Abstract).
16. U. Liqat, Z. Banković, P. Lopez-Garcia, M.V. Hermenegildo. *Inferring Energy Bounds via Static Program Analysis and Evolutionary Modeling of Basic Blocks*. Pre-proceedings of the 27th International Symposium on Logic-Based Program Synthesis and Transformation (LOPSTR'17), October 2017. arXiv:1601.02800.
17. Nataliia Stulova. *On Improving Run-time Checking in Dynamic Languages*. Technical Communications of the 33rd International Conference on Logic Programming (ICLP 2017), OpenAccess Series in Informatics (OASICs), Vol. 58, pages 1501–1510, Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, 2017. CP/ICLP/SAT Doctoral Program 2017.
18. U. Liqat, Z. Banković, P. Lopez-Garcia, M.V. Hermenegildo. *Inferring Energy Bounds Statically by Evolutionary Analysis of Basic Blocks*. Workshop on High Performance Energy Efficient Embedded Systems (HIP3ES 2016), 2016. arXiv:1601.02800.
19. R. Haemmerle, M.V. Hermenegildo, M. Klemen, U. Liqat, P. Lopez-Garcia. *Energy Analysis and Verification by Translation to Horn Clauses and Abstract Interpretation*. Workshop on Horn Clauses for Verification and Synthesis (HCVS'2015), July 2015.

20. P. Lopez-Garcia, R. Haemmerlé, M. Klemen, U. Liqat, M.V. Hermenegildo. *Towards Energy Consumption Verification via Static Analysis*. Workshop on High Performance Energy Efficient Embedded Systems (HIP3ES), arXiv:1501.03064, 11 pages, 2015. arXiv:1512.09369.
21. N. Stulova, J. F. Morales, M.V. Hermenegildo. *Towards Assertion-based Debugging of Higher-Order (C)LP Programs (Extended Abstract)*. Theory and Practice of Logic Programming, 30th Int'l. Conference on Logic Programming (ICLP'14) Special Issue, On-line Supplement, Vol. 14, Num. 4-5, pages 209–210, Cambridge U. Press, July 2014.
22. U. Liqat, S. Kerrison, A. Serrano, K. Georgiou, P. Lopez-Garcia, N. Grech, M.V. Hermenegildo, K. Eder. *Energy Consumption Analysis of Programs based on X MOS ISA-Level Models*. Pre-proceedings of the 23rd International Symposium on Logic-Based Program Synthesis and Transformation (LOPSTR'13), September 2013.
23. A. Serrano, P. Lopez-Garcia, M.V. Hermenegildo. *Towards an Abstract Domain for Resource Analysis of Logic Programs Using Sized Types*. 23rd Workshop on Logic-based Methods in Programming Environments (WLPE 2013), 15 pages, August 2013. CoRR abs/1308.3940.
24. P. Lopez-Garcia, L. Darmawan, F. Bueno, M.V. Hermenegildo. *Interval-based Resource Usage Verification: Formalization and Prototype*. 2nd International Workshop on Foundational and Practical Aspects of Resource Analysis (FOPARA'2011), May 2011.
25. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *The Ciao Approach to the Dynamic vs. Static Language Dilemma*. Proceedings for the International Workshop on Scripts to Programs (STOP'11), 4 pages, ACM, 2011.
26. M. Carro. *The Amos Project: An Approach to Reusing Open Source Code*. Proceedings of the CBD 2002 / ITCLS 2002 CoLogNet Joint Workshop, pages 59–70, Facultad de Informática, September 2002.

Technical Reports and Manuals:

1. Louis Rustenholz, Pedro Lopez-Garcia, José F. Morales, Manuel V. Hermenegildo. *An Order Theory Framework of Recurrence Equations for Static Cost Analysis - Dynamic Inference of Non-Linear Inequality Invariants*. Num. CLIP-1/2024.0, IMDEA Software Institute and Technical University of Madrid (UPM), May 2024.
2. Louis Rustenholz, Maximiliano Klemen, Miguel Ángel Carreira-Perpiñán, Pedro López-García. *A Machine Learning-based Approach for Solving Recurrence Relations and its use in Cost Analysis of Logic Programs*. 2024.
3. J.F. Morales, S. Abreu, D. Ferreira, M.V. Hermenegildo. *Teaching Prolog with Active Logic Documents*. Num. CLIP-1/2022.0, Technical University of Madrid (UPM) and IMDEA Software Institute, December 2022.
4. M.A. Sanchez-Ordaz, I. Garcia-Contreras, V. Perez-Carrasco, J. F. Morales, P. Lopez-Garcia, M.V. Hermenegildo. *VeriFly: On-the-fly Assertion Checking via Incrementality*. Num. CLIP-1/2021.0, 21 pages, The CLIP Lab, IMDEA Software Institute and T.U. Madrid, May 2021.
5. G. Garcia-Pradales, J.F. Morales, M.V. Hermenegildo. *The Ciao Prolog Playground*. Technical University of Madrid (UPM) and IMDEA Software Institute, 2021.
6. I. Garcia-Contreras, J. F. Morales, M.V. Hermenegildo. *An Approach to Incremental and Modular Context-sensitive Analysis of Logic Programs*. Num. CLIP-2/2018.0, 28 pages, The CLIP Lab, IMDEA Software Institute and T.U. Madrid, April 2018.

7. M. Klemen, N. Stulova, P. Lopez-Garcia, J. F. Morales, M.V. Hermenegildo. *An Approach to Static Performance Guarantees for Programs with Run-time Checks*. Num. CLIP-1/2018.0, 15 pages, The CLIP Lab, IMDEA Software Institute and T.U. Madrid, April 2018.
8. P. Lopez-Garcia, R. Haemmerlé, U. Liqat, M. Klemen, M.V. Hermenegildo. *Parametric Static Profiling*. Num. CLIP-2/2015.0, The CLIP Lab, April 2015.
9. N. Stulova, J. F. Morales, M.V. Hermenegildo. *An Approach to Assertion-based Debugging of Higher-Order (C)LP Programs*. Num. CLIP-1/2014.0, 25 pages, The CLIP Lab, January 2014. CoRR abs/1404.4246 [cs.PL].
10. E. Mera, T. Trigo, P. Lopez-Garcia, M.V. Hermenegildo. *An Approach to Profiling for Run-Time Checking of Computational Properties and Performance Debugging*. Num. CLIP3/2010.0, 29 pages, Technical University of Madrid (UPM), March 2010.
11. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla. *An Overview of Ciao and its Design Philosophy*. Num. CLIP2/2010.0, Technical University of Madrid (UPM), March 2010. Under consideration for publication in *Theory and Practice of Logic Programming (TPLP)*.
12. E. Mera, P. Lopez-Garcia, M.V. Hermenegildo. *Towards Integrating Run-Time Checking and Software Testing in a Verification Framework*. Num. CLIP1/2009.0, 19 pages, Technical University of Madrid (UPM), March 2009.
13. E. Mera. *Development of a Prolog Profiler*. Num. CLIP13/2004.1, Technical University of Madrid, September 2004.
14. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla (Eds.). *The Ciao System. Reference Manual (V1.10)*. School of Computer Science, Technical University of Madrid (UPM), June 2004. System and on-line version of the manual available at <https://ciao-lang.org>.
15. J. M. Gomez, M. Carro, J. F. Morales. *The External Interface*. Num. CLIP6/2004.0, 4 pages, School of Computer Science, Technical University of Madrid, May 2004. Deliverable D12 of the AMOS Project.
16. J. F. Morales, E. Mera, M. Carro, J. Correas. *The Interface Internals*. Num. CLIP7/2004.0, 30 pages, School of Computer Science, Technical University of Madrid, May 2004. Deliverable D14 of the AMOS Project.
17. J. Correas, E. Mera, J. F. Morales. *Final Matching Engine*. Num. CLIP8/2004.0, 2 pages, School of Computer Science, Technical University of Madrid, May 2004. Deliverable D15 of the AMOS Project.
18. M. Carro, J. M. Gomez, J. Correas, J. F. Morales, E. Mera, G. Puebla, D. Cabeza, F. Bueno, C. Daffara, M.V. Hermenegildo. *Web site*. Num. CLIP9/2004.0, 2 pages, School of Computer Science, Technical University of Madrid, May 2004. Deliverable D17 of the AMOS Project.
19. M. Carro, J. Correas, C. Daffara, G. Puebla, M.V. Hermenegildo. *Information Spreading*. Num. CLIP10/2004.0, 273 pages, School of Computer Science, Technical University of Madrid, May 2004. Deliverable D18 of the AMOS Project.
20. M. Carro, J. M. Gomez, J. Correas, J. F. Morales, E. Mera, G. Puebla, D. Cabeza, F. Bueno, C. Daffara, M.V. Hermenegildo. *AMOS User's Manual*. Num. CLIP4/2004.0, 44 pages, Technical University of Madrid, March 2004.

21. M. Carro, J. M. Gomez, J. Correas. *The Matching Engine Prototype*. Num. CLIP13/2003.0, 2 pages, School of Computer Science, Technical University of Madrid, August 2003. Deliverable D8 of the AMOS Project.
22. M. Carro, C. Daffara, F. Bueno, D. Cabeza. *Selection Heuristics for Matching*. Num. CLIP12/2003.0, 18 pages, School of Computer Science, Technical University of Madrid, May 2003. Deliverable D7 of the AMOS Project.
23. M. Carro. *The AMOS Project: The Matching Engine Design*. Num. CLIP2/2003.1, Technical University of Madrid, February 2003.
24. M. Carro, J. M. Gomez, J. Correas. *The AMOS Project: The Internal Query Language Design*. Num. CLIP1/2003.1, 77 pages, Technical University of Madrid, December 2002.
25. M. Carro, C. Daffara, G. Puebla. *The AMOS Project: An Approach to Reusing Open Source Software*. Num. CLIP3/2002.0, Technical University of Madrid, August 2002. Presented at the V Hispalinux Conference, Madrid, Spain.
26. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.8)*. Num. CLIP4/2002.1, School of Computer Science, Technical University of Madrid (UPM), May 2002. System and on-line version of the manual available at <https://ciao-lang.org>.
27. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.6)*. Num. CLIP5/2000.1, School of Computer Science, Technical University of Madrid (UPM), July 2000. System and on-line version of the manual available at <https://ciao-lang.org>.
28. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V1.0)*. Num. CLIP11/99.1, School of Computer Science, Technical University of Madrid (UPM), June 1999. System and on-line version of the manual available at <https://ciao-lang.org>.
29. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual (V0.6)*. Num. CLIP12/98.1, School of Computer Science, Technical University of Madrid (UPM), July 1998. System and on-line version of the manual available at <https://ciao-lang.org>.
30. F. Bueno, D. Cabeza, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla. *The Ciao Prolog System. Reference Manual*. Num. CLIP3/97.1, School of Computer Science, Technical University of Madrid (UPM), August 1997. System and on-line version of the manual available at <https://ciao-lang.org>.

17 Publications in Component-Based Software Development

Articles in Refereed Conferences:

1. G. Marpons, J. Mariño, M. Carro, A. Herranz, J.J. Moreno-Navarro, L.Á. Fredlund. *Automatic Coding Rule Conformance Checking Using Logic Programming*. 10th International Symposium on Practical Aspects of Declarative Languages (PADL'08), LNCS, Vol. 4902, pages 18–34, Springer Verlag, January 2008.

Technical Reports and Manuals:

1. G. Marpons, J. Mariño, M. Carro, A. Herranz, J.J. Moreno-Navarro, L.Á. Fredlund. *Automatic Coding Rule Conformance Checking Using Logic Programming*. Num. CLIP6/2007.0, Technical University of Madrid (UPM), August 2007.

18 Publications in Open Source Software

Publications in Refereed Workshops:

1. M. Carro. *The Amos Project: An Approach to Reusing Open Source Code*. Proceedings of the CBD 2002 / ITCLS 2002 CoLogNet Joint Workshop, pages 59–70, Facultad de Informática, September 2002.

Technical Reports and Manuals:

1. J. M. Gomez, M. Carro, J. F. Morales. *The External Interface*. Num. CLIP6/2004.0, 4 pages, School of Computer Science, Technical University of Madrid, May 2004. Deliverable D12 of the AMOS Project.
2. J. F. Morales, E. Mera, M. Carro, J. Correas. *The Interface Internals*. Num. CLIP7/2004.0, 30 pages, School of Computer Science, Technical University of Madrid, May 2004. Deliverable D14 of the AMOS Project.
3. J. Correas, E. Mera, J. F. Morales. *Final Matching Engine*. Num. CLIP8/2004.0, 2 pages, School of Computer Science, Technical University of Madrid, May 2004. Deliverable D15 of the AMOS Project.
4. M. Carro, J. M. Gomez, J. Correas, J. F. Morales, E. Mera, G. Puebla, D. Cabeza, F. Bueno, C. Daffara, M.V. Hermenegildo. *Web site*. Num. CLIP9/2004.0, 2 pages, School of Computer Science, Technical University of Madrid, May 2004. Deliverable D17 of the AMOS Project.
5. M. Carro, J. Correas, C. Daffara, G. Puebla, M.V. Hermenegildo. *Information Spreading*. Num. CLIP10/2004.0, 273 pages, School of Computer Science, Technical University of Madrid, May 2004. Deliverable D18 of the AMOS Project.
6. M. Carro, J. M. Gomez, J. Correas, J. F. Morales, E. Mera, G. Puebla, D. Cabeza, F. Bueno, C. Daffara, M.V. Hermenegildo. *AMOS User's Manual*. Num. CLIP4/2004.0, 44 pages, Technical University of Madrid, March 2004.
7. M. Carro, J. M. Gomez, J. Correas. *The Matching Engine Prototype*. Num. CLIP13/2003.0, 2 pages, School of Computer Science, Technical University of Madrid, August 2003. Deliverable D8 of the AMOS Project.
8. M. Carro, C. Daffara, F. Bueno, D. Cabeza. *Selection Heuristics for Matching*. Num. CLIP12/2003.0, 18 pages, School of Computer Science, Technical University of Madrid, May 2003. Deliverable D7 of the AMOS Project.
9. M. Carro. *The AMOS Project: The Matching Engine Design*. Num. CLIP2/2003.1, Technical University of Madrid, February 2003.
10. M. Carro, J. M. Gomez, J. Correas. *The AMOS Project: The Internal Query Language Design*. Num. CLIP1/2003.1, 77 pages, Technical University of Madrid, December 2002.
11. M. Carro, C. Daffara, G. Puebla. *The AMOS Project: An Approach to Reusing Open Source Software*. Num. CLIP3/2002.0, Technical University of Madrid, August 2002. Presented at the V Hispalinux Conference, Madrid, Spain.

19 Publications in Simulation of Parallel Systems

Articles in Refereed Journals:

1. K. Shen, M.V. Hermenegildo. *High-level Characteristics of Or- and Independent And-parallelism in Prolog*. Int'l. Journal of Parallel Programming, Vol. 24, Num. 5, pages 433–478, Plenum Press, 1996.

Articles in Refereed Conferences:

1. C. Carreras, M.V. Hermenegildo. *Grid-based Histogram Arithmetic for the Probabilistic Analysis of Functions*. Symposium on Abstraction, Reformulation and Approximation (SARA-2000), LNAI, Springer-Verlag, July 2000.
2. M. Fernández, M. Carro, M.V. Hermenegildo. *IDRA (Ideal Resource Allocation): Computing Ideal Speedups in Parallel Logic Programming*. Proceedings of EuroPar'96, LNCS, Num. 1124, pages 724–734, Springer-Verlag, August 1996.
3. C. Carreras, C. López-Barrio, M.V. Hermenegildo. *Analytic Model of a Cache-only Memory Architecture*. Parallel Architectures and Languages Europe – PARLE'94, LNCS, Num. 817, pages 336–351, Springer-Verlag, July 1994.
4. K. Shen, M.V. Hermenegildo. *A Simulation Study of Or- and Independent And-parallelism*. International Logic Programming Symposium, pages 135–151, MIT Press, October 1991.

Publications in Refereed Workshops:

1. M. Fernández, M. Carro, M.V. Hermenegildo. *IDRA (Ideal Resource Allocation): A Tool for Computing Ideal Speedups*. ICLP WS on Parallel and Data Parallel Execution of Logic Programs, 16 pages, June 1994.
2. M.V. Hermenegildo, M. Carro. *Experimenting with Independent And-Parallel Prolog using Standard Prolog*. Jornadas Nacionales de Programación Declarativa, pages 478–497, U. Malaga, October 1991.

Technical Reports and Manuals:

1. M. Fernández, M. Carro, M.V. Hermenegildo. *IDRA (Ideal Resource Allocation): A Tool for Computing Ideal Speedups*. Num. FIM26.3/AI/92, 16 pages, School of Computer Science, Technical University of Madrid, September 1992. Presented at the ICLP'94 Post Conference Workshop on Parallel and Data Parallel Execution of Logic Programs.
2. M.V. Hermenegildo, M. Carro. *Experimenting with Independent And-Parallel Prolog using Standard Prolog*. 24 pages, U. of Madrid (UPM), October 1991. Presented at the 1991 Spanish Workshop on Declarative Programming, Malaga.
3. K. Shen, M.V. Hermenegildo. *A Simulation Study of Or- and Independent And-parallelism*. Num. FIM-60.1/AI/90, Facultad de Informatica, U. P. Madrid, 28660 Boadilla del Monte, Madrid, Spain, October 1990.
4. C. Carreras, M.V. Hermenegildo. *Towards an Analytical Model of the Data Diffusion Machine*. UPM (PEPMA ESPRIT Project technical report), 1990.

20 Publications in Teaching

Books and Monographs:

1. David S. Warren, Veronica Dahl, Thomas Eiter, Manuel V. Hermenegildo, Robert Kowalski, Francesca Rossi. *Prolog - The Next 50 Years*. LNCS, Num. 13900, Springer, July 2023.

Invited Papers and Tutorials:

1. M.V. Hermenegildo, J.F. Morales, P. Lopez-Garcia. *How to Best Teach Prolog*. July 2023. Invited talk at ICLP Special Session: Teaching Prolog: the Next 50 Years and Prolog Education Group. Video at the LP Education group.

Articles in Books and Other Collections:

1. J.F. Morales, S. Abreu, D. Ferreiro, M.V. Hermenegildo. *Teaching Prolog with Active Logic Documents*. Prolog - The Next 50 Years, LNCS, Num. 13900, pages 171–183, Springer, July 2023.
2. M.V. Hermenegildo, J.F. Morales, P. Lopez-Garcia. *Some Thoughts on How to Teach Prolog*. Prolog - The Next 50 Years, LNCS, Num. 13900, pages 107–123, Springer, July 2023.

Publications in Refereed Workshops:

1. Manuel V. Hermenegildo, José F. Morales, Pedro Lopez-Garcia. *Teaching Pure LP with Prolog and a Fair Search Rule*. Proceedings of the 40th ICLP Workshops, Vol. 3799, CEUR-WS.org, October 2024.
2. D. Ferreiro, J.F. Morales, S. Abreu, M.V. Hermenegildo. *Demonstrating (Hybrid) Active Logic Documents and the Ciao Prolog Playground, and an Application to Verification Tutorials*. Technical Communications of the 39th International Conference on Logic Programming (ICLP 2023), Electronic Proceedings in Theoretical Computer Science (EPTCS), Vol. 385, pages 324–330, Open Publishing Association (OPA), July 2023. See also associated poster at <https://cliplab.org/papers/hald-poster-iclp.pdf>.

Technical Reports and Manuals:

1. J.F. Morales, S. Abreu, D. Ferreiro, M.V. Hermenegildo. *Teaching Prolog with Active Logic Documents*. Num. CLIP-1/2022.0, Technical University of Madrid (UPM) and IMDEA Software Institute, December 2022.

21 Publications in Quality of Service

Articles in Refereed Journals:

1. Andreas Metzger, Philip Leitner, Dragan Ivanovic, Eric Schmieders, Roslin Franklin, Manuel Carro, Schahram Dustdar, Klaus Pohl. *Comparing and Combining Predictive Business Process Monitoring Techniques*. System, Man, and Cybernetics: Systems, IEEE Transactions on, Vol. 45, Num. 2, pages 276–290, February 2015.

Articles in Refereed Conferences:

1. D. Ivanović, M. Carro, M.V. Hermenegildo. *Towards Data-Aware QoS-Driven Adaptation for Service Orchestrations*. Proceedings of the 2010 IEEE International Conference on Web Services (ICWS 2010), Miami, FL, USA, 5-10 July 2010, pages 107–114, IEEE, 2010.
2. D. Ivanović, M. Treiber, M. Carro, S. Dustdar. *Building Dynamic Models of Service Compositions With Simulation of Provision Resources*. Proceedings of the 29th International Conference on Conceptual Modeling (ER 2010), Vancouver, Canada, 1-5 November 2010, LNCS 6412, pages 344–358, Springer, 2010.

Articles in Books and Other Collections:

1. A. Metzger, S. Benbernou, M. Carro, M. Driss, G. Kecskemeti, R. Kazhamiakin, K. Krytikos, A. Mocchi, E. Di Nitto, B. Wetzstein, et al.. *Analytical Quality Assurance*. Service Research Challenges and Solutions for the Future Internet, LNCS, Vol. 6500, pages 209–270, Springer Verlag, 2010.
2. S. Benbernou, I. Brandic, C. Cappiello, M. Carro, M. Comuzzi, A. Kertész, K. Kritikos, M. Parkin, B. Pernici, P. Plebani. *Modeling and Negotiating Service Quality*. Service Research Challenges and Solutions for the Future Internet, LNCS, Vol. 6500, pages 157–208, Springer Verlag, 2010.

Publications in Refereed Workshops:

1. D. Ivanović, M. Carro, M.V. Hermenegildo. *An Initial Proposal for Data-Aware Resource Analysis of Orchestrations with Applications to Predictive Monitoring*. International Workshops, ICSOC/ServiceWave 2009, Revised Selected Papers, LNCS, Num. 6275, Springer, September 2010.
2. D. Ivanović, M. Carro, M.V. Hermenegildo. *An Initial Proposal for Data-Aware Resource Analysis of Orchestrations with Applications to Proactive Monitoring*. Pre-proceedings of the 2nd Workshop on Monitoring, Adaptation and Beyond (MONA+), November 2009.

Technical Reports and Manuals:

1. D. Ivanović, M. Carro, M.V. Hermenegildo. *Automated Attribute Inference in Complex Service Workflows Based on Sharing Analysis*. Num. CLIP5/2010.0, Technical University of Madrid (UPM), December 2010.
2. D. Ivanović, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, E. Mera. *Towards Data-Aware Cost-Driven Adaptation for Service Orchestrations*. Num. CLIP5/2009.1, Technical University of Madrid (UPM), March 2010.

3. D. Ivanović, M. Carro, M.V. Hermenegildo. *Sharing-Based Independence-Driven Fragment Identification for Service Orchestrations*. Num. CLIP7/2009.0, Technical University of Madrid (UPM), December 2009.
4. D. Ivanović, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, E. Mera. *Towards Data-Aware Cost-Driven Adaptation for Service Orchestrations*. Num. CLIP5/2009.0, Technical University of Madrid (UPM), November 2009. Replaced by a later version.
5. D. Ivanović, M. Carro, M.V. Hermenegildo. *Towards Data-Aware Resource Analysis for Service Orchestrations*. Num. CLIP3/2009.0, Technical University of Madrid (UPM), June 2009.

22 Publications in Services

Articles in Refereed Journals:

1. D. Ivanovic, M. Carro, M.V. Hermenegildo. *A Sharing-Based Approach to Supporting Adaptation in Service Compositions*. Computing, Vol. 95, Num. 6, pages 453–492, Springer Wien, June 2013.
2. Kyriakos Kritikos, Barbara Pernici, Pierluigi Plebani, Cinzia Cappiello, Marco Comuzzi, Salima Benbernou, Ivona Brandic, Attila Kertesz, Michael Parkin, M. Carro. *A Survey on Service Quality Description*. ACM Computing Surveys, Vol. 46, Num. 1, 2013.

Articles in Refereed Conferences:

1. Dragan Ivanovic, Manuel Carro. *Transforming Service Compositions into Cloud-Friendly Actor Networks*. Service-Oriented Computing - 12th International Conference, ICSOC 2014, Paris, France, November 3-6, 2014. Proceedings, LNCS, Vol. 8831, pages 291–305, Springer Verlag, November 2014.
2. Dragan Ivanović, Manuel Carro, Peerachai Kaowichakorn. *Towards QoS Prediction Based on Composition Structure Analysis and Probabilistic Models*. Service-Oriented Computing - 12th International Conference, ICSOC, LNCS, Vol. 8831, pages 394–402, Springer Verlag, November 2014.
3. D. Ivanovic, M. Carro, M.V. Hermenegildo. *A Constraint-Based Approach to Quality Assurance in Service Choreographies*. 10th International Conference on Service Oriented Computing, ICSOC'12, LNCS, Vol. 7637, Springer Verlag, November 2012.
4. George Bariannys, M. Carro, Dimitris Plexousakis. *Deriving Specifications for Composite Web Services*. IEEE Signature Conference on Computers, Software, and Applications, IEEE Computer Society, IEEE, July 2012.
5. D. Ivanović, M. Carro, M.V. Hermenegildo. *Constraint-Based Runtime Prediction of SLA Violations in Service Orchestrations*. Service-Oriented Computing – ICSOC 2011, LNCS, Vol. 7084, pages 62–76, Springer Verlag, December 2011. Best paper award.
6. D. Ivanović, M. Carro, M.V. Hermenegildo. *Automated Attribute Inference in Complex Service Workflows Based on Sharing Analysis*. Proceedings of the 8th IEEE Conference on Services Computing SCC 2011, pages 120–127, IEEE Press, July 2011.
7. D. Ivanović, M. Carro, M.V. Hermenegildo. *Automatic Fragment Identification in Workflows Based on Sharing Analysis*. Service-Oriented Computing – ICSOC 2010, LNCS, Vol. 6470, pages 350–364, Springer Verlag, 2010.
8. Mohamed Anis Zemni, Salima Benbernou, M. Carro. *A Soft Constraint-Based Approach to QoS-Aware Service Selection*. Service-Oriented Computing – ICSOC 2010, LNCS, Vol. 6470, pages 596–602, Springer Verlag, 2010.
9. D. Ivanović, M. Carro, M.V. Hermenegildo. *Towards Data-Aware QoS-Driven Adaptation for Service Orchestrations*. Proceedings of the 2010 IEEE International Conference on Web Services (ICWS 2010), Miami, FL, USA, 5-10 July 2010, pages 107–114, IEEE, 2010.
10. D. Ivanović, M. Treiber, M. Carro, S. Dustdar. *Building Dynamic Models of Service Compositions With Simulation of Provision Resources*. Proceedings of the 29th International Conference on Conceptual Modeling (ER 2010), Vancouver, Canada, 1-5 November 2010, LNCS 6412, pages 344–358, Springer, 2010.

Invited Papers and Tutorials:

1. D. Ivanović, M. Carro, M.V. Hermenegildo. *Constraint-Based Runtime Prediction of SLA Violations in Service Orchestrations*. 22nd Workshop on Logic-based Methods in Programming Environments, 1 pages, September 2012. (abstract of invited talk).

Articles in Books and Other Collections:

1. S. Benbernou, I. Brandic, C. Cappiello, M. Carro, M. Comuzzi, A. Kertész, K. Kritikos, M. Parkin, B. Pernici, P. Plebani. *Modeling and Negotiating Service Quality*. Service Research Challenges and Solutions for the Future Internet, LNCS, Vol. 6500, pages 157–208, Springer Verlag, 2010.

Publications in Refereed Workshops:

1. D. Ivanovic, M. Carro, M.V. Hermenegildo. *Analyzing Service-Oriented Systems Using Their Data and Structure*. European Software Services and Systems Research – Results and Challenges (ICSE Workshop), July 2012.
2. D. Karastoyanova, Z. Nemeth, M. Carro, D. Ivanovic, C. Pautasso, C. Di Napoli, M. Giordano. *Research Challenges on Service Technology Foundations*. European Software Services and Systems Research – Results and Challenges (ICSE Workshop), July 2012.
3. D. Ivanović, M. Carro, M.V. Hermenegildo. *Exploring the Impact of Inaccuracy and Imprecision of QoS Assumptions on Proactive Constraint-Based QoS Prediction for Service Orchestrations*. Proceedings of the 4th International Workshop on Principles of Engineering Service-Oriented Systems, PESOS 2012, pages 931–937, IEEE Press, June 2012.
4. D. Ivanović, M. Carro, M.V. Hermenegildo. *Constraint-Based Runtime Prediction of SLA Violations in Service Orchestrations*. XII Jornadas sobre Programación y Lenguajes (PROLE), Universidad de Almería, 2012.
5. D. Ivanović, M. Carro, M.V. Hermenegildo. *An Initial Proposal for Data-Aware Resource Analysis of Orchestrations with Applications to Predictive Monitoring*. International Workshops, ICSOC/ServiceWave 2009, Revised Selected Papers, LNCS, Num. 6275, Springer, September 2010.
6. D. Ivanović, M. Carro, M.V. Hermenegildo. *An Initial Proposal for Data-Aware Resource Analysis of Orchestrations with Applications to Proactive Monitoring*. Pre-proceedings of the 2nd Workshop on Monitoring, Adaptation and Beyond (MONA+), November 2009.

Technical Reports and Manuals:

1. D. Ivanović, M. Carro, M.V. Hermenegildo. *Automated Attribute Inference in Complex Service Workflows Based on Sharing Analysis*. Num. CLIP5/2010.0, Technical University of Madrid (UPM), December 2010.
2. D. Ivanović, M. Carro, M.V. Hermenegildo. *Automatic Fragment Identification in Workflows Based on Sharing Analysis*. Num. CLIP4/2010.0, 15 pages, Technical University of Madrid (UPM), June 2010. Submitted.
3. D. Ivanović, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, E. Mera. *Towards Data-Aware Cost-Driven Adaptation for Service Orchestrations*. Num. CLIP5/2009.1, Technical University of Madrid (UPM), March 2010.

4. D. Ivanović, M. Carro, M.V. Hermenegildo. *Sharing-Based Independence-Driven Fragment Identification for Service Orchestrations*. Num. CLIP7/2009.0, Technical University of Madrid (UPM), December 2009.
5. D. Ivanović, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, E. Mera. *Towards Data-Aware Cost-Driven Adaptation for Service Orchestrations*. Num. CLIP5/2009.0, Technical University of Madrid (UPM), November 2009. Replaced by a later version.
6. D. Ivanović, M. Carro, M.V. Hermenegildo. *Towards Data-Aware Resource Analysis for Service Orchestrations*. Num. CLIP3/2009.0, Technical University of Madrid (UPM), June 2009.

23 Publications in Service Aggregation and Composition

Articles in Refereed Conferences:

1. Dragan Ivanovic, Manuel Carro. *Transforming Service Compositions into Cloud-Friendly Actor Networks*. Service-Oriented Computing - 12th International Conference, ICSOC 2014, Paris, France, November 3-6, 2014. Proceedings, LNCS, Vol. 8831, pages 291–305, Springer Verlag, November 2014.
2. Dragan Ivanović, Manuel Carro, Peerachai Kaowichakorn. *Towards QoS Prediction Based on Composition Structure Analysis and Probabilistic Models*. Service-Oriented Computing - 12th International Conference, ICSOC, LNCS, Vol. 8831, pages 394–402, Springer Verlag, November 2014.
3. D. Ivanovic, M. Carro, M.V. Hermenegildo. *A Constraint-Based Approach to Quality Assurance in Service Choreographies*. 10th International Conference on Service Oriented Computing, ICSOC'12, LNCS, Vol. 7637, Springer Verlag, November 2012.
4. George Bariannys, M. Carro, Dimitris Plexousakis. *Deriving Specifications for Composite Web Services*. IEEE Signature Conference on Computers, Software, and Applications, IEEE Computer Society, IEEE, July 2012.
5. D. Ivanović, M. Carro, M.V. Hermenegildo. *Constraint-Based Runtime Prediction of SLA Violations in Service Orchestrations*. Service-Oriented Computing – ICSOC 2011, LNCS, Vol. 7084, pages 62–76, Springer Verlag, December 2011. Best paper award.
6. D. Ivanović, M. Carro, M.V. Hermenegildo. *Automated Attribute Inference in Complex Service Workflows Based on Sharing Analysis*. Proceedings of the 8th IEEE Conference on Services Computing SCC 2011, pages 120–127, IEEE Press, July 2011.
7. D. Ivanović, M. Carro, M.V. Hermenegildo. *Automatic Fragment Identification in Workflows Based on Sharing Analysis*. Service-Oriented Computing – ICSOC 2010, LNCS, Vol. 6470, pages 350–364, Springer Verlag, 2010.
8. Mohamed Anis Zemni, Salima Benbernou, M. Carro. *A Soft Constraint-Based Approach to QoS-Aware Service Selection*. Service-Oriented Computing – ICSOC 2010, LNCS, Vol. 6470, pages 596–602, Springer Verlag, 2010.
9. D. Ivanović, M. Carro, M.V. Hermenegildo. *Towards Data-Aware QoS-Driven Adaptation for Service Orchestrations*. Proceedings of the 2010 IEEE International Conference on Web Services (ICWS 2010), Miami, FL, USA, 5-10 July 2010, pages 107–114, IEEE, 2010.
10. D. Ivanović, M. Treiber, M. Carro, S. Dustdar. *Building Dynamic Models of Service Compositions With Simulation of Provision Resources*. Proceedings of the 29th International Conference on Conceptual Modeling (ER 2010), Vancouver, Canada, 1-5 November 2010, LNCS 6412, pages 344–358, Springer, 2010.

Invited Papers and Tutorials:

1. D. Ivanović, M. Carro, M.V. Hermenegildo. *Constraint-Based Runtime Prediction of SLA Violations in Service Orchestrations*. 22nd Workshop on Logic-based Methods in Programming Environments, 1 pages, September 2012. (abstract of invited talk).

Publications in Refereed Workshops:

1. D. Ivanović, M. Carro, M.V. Hermenegildo. *Exploring the Impact of Inaccuracy and Imprecision of QoS Assumptions on Proactive Constraint-Based QoS Prediction for Service Orchestrations*. Proceedings of the 4th International Workshop on Principles of Engineering Service-Oriented Systems, PESOS 2012, pages 931–937, IEEE Press, June 2012.
2. D. Ivanović, M. Carro, M.V. Hermenegildo. *Constraint-Based Runtime Prediction of SLA Violations in Service Orchestrations*. XII Jornadas sobre Programación y Lenguajes (PROLE), Universidad de Almería, 2012.
3. D. Ivanović, M. Carro, M.V. Hermenegildo. *An Initial Proposal for Data-Aware Resource Analysis of Orchestrations with Applications to Predictive Monitoring*. International Workshops, ICSOC/ServiceWave 2009, Revised Selected Papers, LNCS, Num. 6275, Springer, September 2010.
4. D. Ivanović, M. Carro, M.V. Hermenegildo. *An Initial Proposal for Data-Aware Resource Analysis of Orchestrations with Applications to Proactive Monitoring*. Pre-proceedings of the 2nd Workshop on Monitoring, Adaptation and Beyond (MONA+), November 2009.

Technical Reports and Manuals:

1. D. Ivanović, M. Carro, M.V. Hermenegildo. *Automated Attribute Inference in Complex Service Workflows Based on Sharing Analysis*. Num. CLIP5/2010.0, Technical University of Madrid (UPM), December 2010.
2. D. Ivanović, M. Carro, M.V. Hermenegildo. *Automatic Fragment Identification in Workflows Based on Sharing Analysis*. Num. CLIP4/2010.0, 15 pages, Technical University of Madrid (UPM), June 2010. Submitted.
3. D. Ivanović, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, E. Mera. *Towards Data-Aware Cost-Driven Adaptation for Service Orchestrations*. Num. CLIP5/2009.1, Technical University of Madrid (UPM), March 2010.
4. D. Ivanović, M. Carro, M.V. Hermenegildo. *Sharing-Based Independence-Driven Fragment Identification for Service Orchestrations*. Num. CLIP7/2009.0, Technical University of Madrid (UPM), December 2009.
5. D. Ivanović, M. Carro, M.V. Hermenegildo, P. Lopez-Garcia, E. Mera. *Towards Data-Aware Cost-Driven Adaptation for Service Orchestrations*. Num. CLIP5/2009.0, Technical University of Madrid (UPM), November 2009. Replaced by a later version.
6. D. Ivanović, M. Carro, M.V. Hermenegildo. *Towards Data-Aware Resource Analysis for Service Orchestrations*. Num. CLIP3/2009.0, Technical University of Madrid (UPM), June 2009.

24 Publications in Graphical Communication

Articles in Refereed Journals:

1. Nicolas Fay, Simon Garrod, Leo Roberts, Nik Swoboda. *The Interactive Evolution of Human Communication Systems*. *Cognitive Science*, Vol. 34, pages 351–386, 2010.
2. Simon Garrod, Nicolas Fay, Shane Rogers, Bradley Walker, Nik Swoboda. *Can Iterated Learning Explain the Emergence of Graphical Symbols?*. *Interaction Studies*, Vol. 11, pages 33–50, 2010.
3. Patrick G.T. Healey, Nik Swoboda, Ichiro Umata, James King. *Graphical Language Games: Interactional constraints on representational form*. *Cognitive Science*, Vol. 31, pages 285–309, 2007.

Articles in Refereed Conferences:

1. Bradley Walker, Nicolas Fay, Shane Rogers, Nik Swoboda. *Experimental Investigation of the Role of Collaboration in the Evolution of Communication Systems*. Proceedings of the 31st Annual Conference of the Cognitive Science, pages 1388–1393, Cognitive Science Society, 2009.
2. Patrick G.T. Healey, Nik Swoboda. *A Perspective on Language Evolution from Studies of Graphical Languages*. Proceedings of Evolution of Language: Fifth International Conference, pages 52–52, March 2004.
3. Patrick G. T. Healey, Nik Swoboda, James King. *Co-ordinating Conventions in Graphical Dialogue: Effects of Repetition and Interaction*. Diagrammatic Representation and Inference, Lecture Notes in Artificial Intelligence, Num. 2980, pages 286–300, Springer-Verlag, 2004.
4. Nicolas Fay, Nik Swoboda, Takugo Fukaya, Ichiro Umata, Yasuhiro Katagiri. *Using Graphics to Communicate Across Cultures*. Diagrammatic Representation and Inference, Lecture Notes in Artificial Intelligence, Num. 2980, pages 347–350, Springer-Verlag, 2004.
5. Patrick G.T. Healey, James King, Nik Swoboda, Ichiro Umata. *Graphical Language Games: Interaction and Abstraction*. Proceedings of IGC2003: Second International Workshop on Interactive Graphical Communication, Working papers in Computer Science, Num. WP-03-01, pages 35–48, 2003.

Publications in Refereed Workshops:

1. Nik Swoboda, Patrick G.T. Healey, Gonzalo Berrocal Noguerales. *A prototype body orientation based drawing system*. First International Workshop on Pen-Based Learning Technologies (PLT 2007), pages 16–19, IEEE Computer Society, May 2007.

25 Publications in Diagrammatic Reasoning

Articles in Refereed Journals:

1. Dave Barker-Plummer, Nik Swoboda. *Reasoning with coincidence grids - A sequent-based logic and an analysis of complexity*. Visual Languages and Computing, Vol. 22, Num. 1, pages 56–65, 2011.
2. Nik Swoboda, Gerard Allwein. *Heterogeneous Reasoning with Euler/Venn Diagrams Containing Named Constants and FOL*. Electronic Notes in Theoretical Computer Science, Vol. 134, pages 153–187, June 2005. Available at <https://www.sciencedirect.com/science/journal/15710661>.
3. Nik Swoboda, Gerard Allwein. *Using DAG Transformations to Verify Euler/Venn Homogeneous and Euler/Venn FOL Heterogeneous Rules of Inference*. Journal on Software & System Modeling, Vol. 3, Num. 2, pages 136–149, May 2004. The original publication is available at springerlink.com (DOI) 10.1007/s10270-003-0044-8.

Articles in Refereed Conferences:

1. Dave Barker-Plummer, Nik Swoboda, Michael D. Murray. *An Example HyperVenn Proof*. Diagrammatic Representation and Inference - 8th International Conference, Diagrams 2014, Melbourne, VIC, Australia, July 28 - August 1, 2014. Proceedings, pages 51–53, July 2014.
2. Dave Barker-Plummer, John Etchemendy, Michael Murray, Emma Pease, Nik Swoboda. *Learning to Use the Openbox: A Framework for the Implementation of Heterogeneous Reasoning*. Diagrammatic Representation and Inference, Lecture Notes in Artificial Intelligence, Vol. 7352, 2 pages, Springer, 2012.
3. Dave Barker-Plummer, John Etchemendy, Albert Liu, Michael Murray, Nik Swoboda. *Open-proof - A Flexible Framework for Heterogeneous Reasoning*. Diagrammatic Representation and Inference, Lecture Notes in Artificial Intelligence, Vol. 5223, pages 347–349, Springer, 2008.

Books and Monographs:

1. Dave Barker-Plummer, Richard Cox, Nik Swoboda. *Diagrammatic Representation and Inference*. Lecture Notes in Artificial Intelligence, Num. 4045, 300 pages, Springer, June 2006.

Publications in Refereed Workshops:

1. Dave Barker-Plummer, Nik Swoboda. *A Sequent Based Logic for Coincidence Grid*. CEUR Workshop Proceedings, Vol. 274, pages 1–12, September 2007. Available at <https://ftp.informatik.rwth-aachen.de/Publications/CEUR-WS/Vol-274/>.

26 Publications in Research Policy

Invited Papers and Tutorials:

1. Floriana Esposito, Carlo Ghezzi, Manuel V. Hermenegildo, Helene Kirchner, Luke Ong. *Informatics Research Evaluation*. 12 pages, Informatics Europe, March 2018. Available at https://www.informatics-europe.org/news/436-research_evaluation.html.
2. M.V. Hermenegildo. *Conferences vs. Journals in CS, what to do? Evolutionary ways forward and the ICLP/TPLP model*. Dagstuhl 12452: Publication Culture in Computing Research – Position Papers, Num. 12452, 12 pages, IBFI – Dagstuhl, November 2012. Slides: <https://cliplab.org/papers/dagstuhl-tplpmove-slides.pdf>.

27 Publications in Other Topics and General Publications

Articles in Refereed Journals:

1. M. Carro, Ángel Herranz, Julio Mariño. *A Model-Driven Approach to Teaching Concurrency*. ACM Transactions on Computer Education, Vol. 13, Num. 1, 2013.
2. Stacy E. Finkelstein, Peter Freyd, James Lipton. *A New Framework for Declarative Programming*. Theoretical Computer Science, Vol. 300, Num. 1–3, pages 91–160, Elsevier Science, May 2003.

Articles in Refereed Conferences:

1. Nik Swoboda, Juan Bekios-Calfa, Luis Baumela, Javier de Lope. *An Introduction to AI Course with Guide Robot Programming Assignments*. Proceedings of the 42nd ACM Technical Symposium on Computer Science Education, pages 231–236, ACM, ACM SIGCSE, 2011.
2. Ruben Vazquez, Nik Swoboda. *Combining the Semantic Web with the Web as Background Knowledge for Ontology Mapping*. OTM Conferences (1), Lecture Notes in Computer Science, Vol. 4803, pages 814–831, Springer, November 2007.
3. M. Carro, J. Mariño, A. Herranz, J.J. Moreno-Navarro. *Teaching How to Derive Correct Concurrent Programs from State-Based Specifications*. Symposium on Teaching Formal Methods 2004, Lecture Notes in Computer Science, Num. 3294, pages 85–106, Springer Verlag, Formal Methods Europe, November 2004.
4. C. Carreras, M.V. Hermenegildo. *Grid-based Histogram Arithmetic for the Probabilistic Analysis of Functions*. Symposium on Abstraction, Reformulation and Approximation (SARA-2000), LNAI, Springer-Verlag, July 2000.
5. M.V. Hermenegildo. *A Documentation Generator for (C)LP Systems*. International Conference on Computational Logic, CL2000, LNAI, Num. 1861, pages 1345–1361, Springer-Verlag, July 2000.
6. G. Puebla, M. Comini, W. Drabent, M. Ducass, M. Fabris, M. Meier, Ch. Schulte. *Tools and Environments for Constraint Logic Programming*. International Logic Programming Symposium, pages 417–418, October 1997. Workshop abstract.

Books and Monographs:

1. B. Accattoli, M.V. Hermenegildo (Eds.). *Proceedings of the 24th International Symposium on Principles and Practice of Declarative Programming (PPDP 2022)*. ACM ICPS Proceedings, 187 pages, ACM, September 2022.
2. Manuel V. Hermenegildo, Pedro Lopez-Garcia, Alberto Pettorossi, Maurizio Proietti (Eds.). *Fundamenta Informaticae, Special Issue on the 26th International Symposium on Logic-Based Program Synthesis and Transformation: LOPSTR 2016*. Vol. 177, Num. 3–4, IOS Press, December 2020.
3. M.V. Hermenegildo, P. Lopez-Garcia (Eds.). *Logic-Based Program Synthesis and Transformation - 26th International Symposium, LOPSTR 2016, Edinburgh, UK, September 6-8, 2016, Revised Selected Papers*. Lecture Notes in Computer Science, Num. 10184, 330 pages, Springer, July 2017.
4. Manuel Carro, Andy King (Eds.). *32nd International Conference on Logic Programming*. Vol. 16, Num. 5-6, Cambridge University Press, September 2016.

5. A. Zaks, M.V. Hermenegildo. *Proceedings of the 25th International Conference on Compiler Construction (CC 2016)*. ACM, March 2016.
6. M. Carro, D. Karastoyanova, G. A. Lewis, A. Liu. *Third International Workshop on Principles of Engineering Service-Oriented Systems (PESOS 2011)*. ACM, May 2011.
7. M. Carro, J.H. Reppy. *ACM SIGPLAN Proceedings of the Workshop on Declarative Aspects of Multicore Programming*. ACM, January 2011.
8. M.V. Hermenegildo, T. Schaub. *Theory and Practice of Logic Programming. 26th Int'l. Conference on Logic Programming (ICLP'10) Special Issue*. Vol. 10 (4–6), pages 361–778, Cambridge University Press, July 2010.
9. M.V. Hermenegildo, T. Schaub. *Technical Communications of the 26th Int'l. Conference on Logic Programming (ICLP'10)*. Leibniz International Proceedings in Informatics (LIPIcs), Vol. 7, Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, July 2010.
10. M.V. Hermenegildo, J. Palsberg. *Proceedings of the 37th ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages (POPL 2010)*. ACM, January 2010.
11. M. Carro, R. Peña-Marí. *Practical Aspects of Declarative Languages – 12th. International Symposium, PADL 2010*. LNCS, Vol. 5937, Springer-Verlag, January 2010.
12. G. Barthe, M.V. Hermenegildo. *Verification, Model Checking, and Abstract Interpretation, 11th International Conference, VMCAI 2010*. LNCS, Vol. 5944, Springer, January 2010.
13. G. Puebla, G. Vidal. *ACM SIGPLAN Partial Evaluation and Program Manipulation (PEPM'09)*. 200 pages, ACM Digital Library, January 2009.
14. J. Garrigue, M.V. Hermenegildo. *Functional and Logic Programming, 9th International Symposium, FLOPS'08*. LNCS, Num. 4989, Springer, April 2008.
15. M.V. Hermenegildo. *ACM SIGPLAN-Intel Workshop on Declarative Aspects of Multicore Programming, DAMP'08, Informal Proceedings*. January 2008.
16. G. Puebla. *Logic Based Program Synthesis and Transformation (LOPSTR'06)*. LNCS, Num. 4407, 237 pages, Springer, March 2007.
17. M.V. Hermenegildo, D. Cabeza. *Practical Aspects of Declarative Languages – 7th. International Symposium, PADL 2005*. LNCS, Num. 3350, 278 pages, Springer-Verlag, January 2005.
18. M. Leuschel, F. Bueno. *Preproceedings of the International Workshop on Logic Based Program Development and Transformation*. 304 pages, Facultad de Informatica, September 2002.
19. I. de Castro Dutra, M. Carro, V. Santos Costa, G. Gupta, E. Pontelli, F. Silva (editors). *Parallelism and Implementation of Logic and Constraint Logic Programming*. Nova Science Publishers, 1999.
20. G. Puebla, M. Comini, W. Drabent, M. Ducasse, M. Fabris, M. Meier, Ch. Schulte. *Proceedings of the ILPS'97 Workshop on Tools and Environments for Constraint Logic Programming*. Num. CLIP7/97.1, 180 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), October 1997.
21. P. Tarau, K. De Bosschere, M.V. Hermenegildo. *Proceedings of the 2nd Workshop on Logic Programming Tools for INTERNET Applications*. 140 pages, K.U. Leuven, July 1997. Available from <https://www.cliplab.org/lpnet/proceedings97/index.html>.

22. P. Tarau, A. Davison, K. De Bosschere, M.V. Hermenegildo. *Proceedings of the 1st Workshop on Logic Programming Tools for INTERNET Applications*. 122 pages, U. of Moncton, Canada, September 1996. Available from <https://www.cliplab.org/miscdocs/lp-internet/archive.html>.
23. M. Carro, E. Pontelli. *Proceedings of the Fourth COMPULOG-NET Area Workshop on Parallelism and Implementation Technologies for (Constraint) Logic Languages*. 235 pages, Computer Science Department, Technical University of Madrid, September 1996.
24. P. Lopez-Garcia, M.V. Hermenegildo. *Proceedings of the Third COMPULOG-NET Area Workshop on Parallelism and Implementation Technologies*. 108 pages, U. of Utrecht, September 1995.
25. M.V. Hermenegildo, D. Swierstra. *Programming Languages: Implementations, Logics, and Programs – Proc. of the 1995 Conference*. LNCS, Num. 982, 466 pages, Springer-Verlag, September 1995.
26. M. García de la Banda, M.V. Hermenegildo. *Proceedings of the Second COMPULOG-NET Area Workshop on Parallelism and Implementation Technologies*. 96 pages, FIM/UPM, Madrid, Spain, September 1994.
27. M.V. Hermenegildo, J. Penjam. *Programming Language Implementation and Logic Programming – Proc. of the 1994 Conference*. LNCS, Num. 844, 468 pages, Springer-Verlag, September 1994.
28. M. Bruynooghe, S.K. Debray, M.V. Hermenegildo, M. Maher. *The Journal of Logic Programming – Special Issue: Ten Years of Logic Programming*. Vol. 19/20, 714 pages, Elsevier - North-Holland, May 1994.
29. F. Bueno, M.V. Hermenegildo, J. Moreno-Navarro. *Proceedings of the First COMPULOG-NET Area Workshop on Parallelism and Implementation Technologies*. 78 pages, FIM/UPM, Madrid, Spain, May 1993.
30. M.V. Hermenegildo, J. Moreno-Navarro. *Actas del Primer Congreso Nacional de Programación Declarativa*. 398 pages, FIM/UPM, Madrid, Spain, September 1992.
31. S. K. Debray, M.V. Hermenegildo. *Logic Programming – Proc. of the North American Conference*. 850 pages, MIT Press, Cambridge, MA, October 1990.
32. M.V. Hermenegildo. *Proc. of the Workshop on Future Directions in Logic Programming*. 210 pages, MCC, Austin, TX, April 1987.

Invited Papers and Tutorials:

1. Manuel V. Hermenegildo, Pedro Lopez-Garcia, Alberto Pettorossi, Maurizio Proietti. *Preface, Fundamenta Informaticae, Special Issue on the 26th International Symposium on Logic-Based Program Synthesis and Transformation: LOPSTR 2016*. Vol. 177, Num. 3–4, pages 1–3, IOS Press, December 2020.
2. M.V. Hermenegildo, T. Schaub. *Introduction to the 26th Int'l. Conference on Logic Programming (ICLP'10) Special Issue*. Vol. 10, Num. 4–6, pages 361–364, Cambridge University Press, July 2010.
3. M.V. Hermenegildo, T. Schaub. *Introduction to Technical Communications of the 26th Int'l. Conference on Logic Programming (ICLP'10)*. Technical Communications of the 26th Int'l. Conference on Logic Programming (ICLP'10), Leibniz International Proceedings in Informatics (LIPIcs), Vol. 7, pages 8–11, Schloss Dagstuhl–Leibniz-Zentrum fuer Informatik, July 2010.

4. M. Carro, M. Freire . *Saldando Cuentas*. Novática, Num. 186-187, 3 pages, Asociación de Técnicos en Informática, January 2007. Available at <https://www.ati.es/novatica/>.
5. M. Carro, M. Freire . *Programas equivalentes*. Novática, Num. 178-179, 3 pages, Asociación de Técnicos en Informática, January 2006. Available at <https://www.ati.es/novatica/>.
6. O. Martínez, M. Carro. *Subsecuencias de la secuencia mira-y-nombra*. Novática, Num. 167-168, 8 pages, Asociación de Técnicos en Informática, January 2004. Available at <https://www.ati.es/novatica/>.
7. M. Carro, O. Martínez. *¿Dónde está mi interrupción?*. Novática, Num. 165-166, 8 pages, Asociación de Técnicos en Informática, September 2003. Available at <https://www.ati.es/novatica/>.
8. A. Herranz, P. Sánchez, M. Carro, J. Mariño. *Almejas gigantes e interfaces de usuario*. Novática – Revista de la Asociación de Técnicos en Informática, Num. 160-161, 8 pages, Asociación de Técnicos en Informática, November 2002. Journal available at <https://www.ati.es/novatica/>.
9. A. Herranz, J. Mariño, M. Carro, P. Sánchez. *No taléis el bosque por culpa de los árboles*. Novática – Revista de la Asociación de Técnicos en Informática, Num. 158-159, 10 pages, Asociación de Técnicos en Informática, July 2002. Journal available at <https://www.ati.es/novatica/>.
10. M. Carro, P. Sánchez, J. Mariño, A. Herranz. *¡Queso!*. Novática – Revista de la Asociación de Técnicos en Informática, Num. 156-157, 7 pages, Asociación de Técnicos en Informática, March 2002. Journal available at <https://www.ati.es/novatica/>.
11. M. Carro, A. Herranz, J. Mariño, P. Sánchez. *Configuración de un aeropuerto*. Novática – Revista de la Asociación de Técnicos en Informática, Num. 155-156, 7 pages, Asociación de Técnicos en Informática, January 2002. Journal available at <https://www.ati.es/novatica/>.
12. F. Bueno, D. Cabeza, M. Carro, J. Correas, J. Gómez, M.V. Hermenegildo, P. Lopez-Garcia, G. Puebla, C. Vaucheret. *Agent Programming in Ciao Prolog*. 10 th. Portuguese Conference on Artificial Intelligence (EPIA), LNAI, Num. 2258, 2 pages, Springer-Verlag, December 2001.

Articles in Books and Other Collections:

1. Angel Borrego, Nik Swoboda. *Images from www.wordww.net*. Cárcel de amor: relatos culturales sobre la violencia de género, pages 306–307, Museo Nacional Centro de Arte Reina Sofía, 2005.
2. M.V. Hermenegildo. *The Role of Computational Logic as a Hinge Paradigm among Deduction, Problem Solving, Programming, and Parallelism*. Knowledge Oriented Software Design, pages 207–221, North-Holland, September 1993.

Publications in Refereed Workshops:

1. M.V. Hermenegildo. *A System for Automatically Generating Documentation for (C)LP Programs*. Special Issue on Parallelism and Implementation of (C)LP Systems, Electronic Notes in Theoretical Computer Science, Vol. 30, Num. 4, March 2000.
2. M.V. Hermenegildo. *A Documentation Generator for Logic Programming Systems*. ICLP'99 Workshop on Logic Programming Environments, pages 80–97, N.M. State University, December 1999.

3. I. Walker, M.V. Hermenegildo. *An application of AI techniques and parallel implementation technology to the trajectory planning problem for redundant robot manipulators*. 1987 IEEE International Workshop on Robotics: Trends, Technology, and Applications, pages 53–61, ETSInf, IEEE, February 1988.

Technical Reports and Manuals:

1. M. DeMarco, J. Lipton. *Uniform Algebras*. Num. CLIP16/2004.0, 20 pages, Technical University of Madrid, October 2004.
2. M. DeMarco, J. Lipton. *Completeness and Cut Elimination in Church's Intuitionistic Theory of Types*. Num. CLIP15/2004.0, 32 pages, Technical University of Madrid, August 2004.
3. M.V. Hermenegildo, D. Cabeza, M. Rodriguez. *Using Ciao inside GNU Emacs*. Num. CLIP4/2000.1, 18 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), 2000.
4. M.V. Hermenegildo. *A Documentation Generator for Logic Programming Systems*. Num. CLIP10/99.0, 15 pages, Facultad de Informática, UPM, Technical University of Madrid (UPM), September 1999.