Manuel Hermenegildo

Areas of Interest:

Advanced Program Development Technology, Global Program Analysis / Optimization / Verification, Abstract Interpretation, Abstract Machines, Parallelizing Compilers, Resource-Aware Distributed Execution and Logical Agents, Automatic Hypertext/Web-site Generation, Automatic Documentation Tools, Constraint/Logic/Functional Programming Theory and Implementation, Execution Visualization, Sequential and Parallel Computer Architecture.

Education:

Aug 1986	**PhD.**, Electrical and Computer Eng., University of Texas at Austin.
Aug 1984	**M. S.**, Electrical and Computer Eng., University of Texas at Austin.
Jun 1981	**M. S.**, Electrical Eng., Technical U. of Madrid.

Positions:

Jan 2007-... — **Scientific Director**, *Madrid Institute for Advanced Research in Software Development Technology (IMDEA-Software)*; Spain, *and*

Jan 1990-... — **Full Professor** (January 1990-May 1994 **Associate Professor**), *Technical U. of Madrid*, Department of Computer Science; Spain.

General scientific coordination of the Institute. Research. Graduate and undergraduate teaching. PhD. student supervision. Leader of the CLIP (Computational Logic, Implementation and Parallelism) Lab. Principal investigator in several EU/ESPRIT and national projects on automatic parallelization, verification, abstraction carrying code, global analysis of programs, constraint logic programming, implementation of concurrent constraint languages, program debugging, automatic Web-site generation, next generation program development environments, and others.

Feb 03-Dec 08 — **Prince of Asturias Endowed Chair** in Information Science and Technology, *U. of New Mexico*, Departments of Computer Science and Electrical and Computer Engineering; Albuquerque, NM, USA

Research. Graduate and undergraduate teaching. PhD. student supervision. International student supervision under exchange programs.

May 00-Sep 02 — **Director** of the *Spanish National Research Directorate* (Spanish central agency financing research in all areas of science and technology).

Creation of the directorate from a number of previously existing units. Design and management of all programs funding projects, human resources, and infrastructures. Coordination with regional, European, and international programs. Benchmarking of the national S&T system. Member, board of directors of the Spanish Foundation for Science and Technology, the Spanish Scientific Research Council (CSIC), and the Spanish Center for Industrial and Technological Development (CDTI). Spanish representative in the European Union Advisory Committee for Research (CREST).

Oct 86-Dec 89 — **Member, Technical Staff**, *MCC*, Parallel Processing Program and ACA/Systems Technology Lab.; Austin, Texas.

Principal Investigator, PAL project: parallel and sequential high performance implementation of next generation languages and systems. Development of theoretical bases, execution models, and actual implementations of high-performance parallel logic programming systems. Design and simulation of coherent-cache, cluster-based multiprocessors. Performance studies of execution models on several parallel architectures and organizations.

Mar 87-Jan 90	**Assistant/Associate Professor** (adjunct), *University of Texas at Austin,* Computer Science Department.
	Teaching (Computer Architecture, Logic Programming). Supervision of PhD. students working in the areas of parallel computer architecture, parallel execution model theory and design, abstract interpretation, and automatic parallelization.
Jun 81-Aug 81	**Design Engineer**, *Siemens Gmbh.*; Munich, Germany.
	Electronic circuit design and embedded systems development for audio and automotive applications.
Jan 80-Oct 82	**President**, *HC Electronics*; Madrid, Spain.
	Co-owned venture, involved in the development and licensing of electronic circuit designs and prototypes. Products included a Speech Scrambler marketed by Eurotronica S.A., and a Spectrum Scanning System installed at the National Optics Institute.

Other Selected Activities, Honors, and Awards:

- "Julio Rey Pastor" **Prize for Research in Mathematics and Information and Communication Technologies**, 2006 (highest Spanish national scientific award in the areas of mathematics and information technology). "Aritmel" **Prize for Scientific Merit in Computer Science**, 2005.

- **Invited talks and/or tutorials** at the 30 Years of Abstract Interpretation POPL'08 meeting, European Computer Science Summit'08, DAMP'07, EEAI'06, DAMP'06, ACM SAC'06, PPDP'05, EUROPAR'04, EU-IST GRIDS'04, SAS'03, ICALP'02, ERCIM/CoLogNet'02, LPAR'01, CL'00, CMPP'00, AgentLink'99 WS, ICLP'99, AFLP'98, EUROPAR'97, ILPS'97, ICLP'97, PAAM / PAP'97, CCL'96, LPAR'94, JICSLP'92, SAS'92, IEEE CompEuro 92, ICLP'89 and at several Workshops and Summer Schools.

- **Associate Editor** of the *"Journal of New Generation Computing"* (Springer-Verlag), **Editorial Adviser** and former **Area Editor** (architecture and implementation) of *"Theory and Practice of Logic Programming"* (Cambridge U. Press) (formerly, the *"Journal of Logic Programming"*, Elsevier North-Holland), **Area Editor** of *"Journal of Applied Logic"* (Elsevier North-Holland), former **Associate Editor** of *"ACM Transactions on Programming Languages and Systems"* (ACM).

- **Program Committee Chairman or Co-Chairman**: *"2010 International Conference on Logic Programming"*, 2010, Edinburgh, UK, *"2008 Declarative Aspects of Multicore Programming"* (San Francisco, CA, USA), *2008 International Symposium on Functional and Logic Programming (FLOPS'08)* (Ise, Japan), *"2005 Practical Aspects of Declarative Programming Symposium"* PADL'05 (Long Beach, CA, USA), *"2002 Static Analysis Symposium"*, SAS'02 (Madrid, Spain), *"Parallel Symbolic Computing"* track of EUROPAR'97, 1997 (Passau, Germany); *"Programming Languages: Implementations, Logics, and Programs"*, 1994 (Madrid, Spain) and 1995 (Utrecht, The Netherlands); *"North American Conference on Logic Programming"*, 1990, Austin, TX.

- **Conference Chair or Co-Chair**, *"ACM Principles of Programming Languages"* POPL 2010, Madrid, Spain, *"International Conference on Logic Programming"* ICLP 2006, Seattle, WA, USA, *"2005 Symposium on Practical Aspects of Declarative Languages"* PADL'05, Long Beach, CA, USA, *"2002 Static Analysis Symposium"* SAS'02, Madrid, Spain, *Joint "Algebraic and Logic Programming"* and *"Programming Languages: Implementations, Logics, and Programs"* conferences, 1994, Madrid, Spain, *First Spanish Conference on Declarative Programming*, PROLE'92, as well as a number of workshops since 1987.

- **Program Committee Member** for several conferences including ICLP'08, SAS'08, ServiceWave'08, TGC'07, SAS'07, TGC'06, FLOPS'06, PADL'06, ESOP'05, ICALP'05, PP-SWR'05, AEPIA'05, PROLE'05, ICLP'04, EUMAS'04, PDCS'04, PROLE'04, PPDP'03,

CP'03, PADL'03, EUMAS'03, PPDP'02, ICLP'01, SAS01, LOPSTR'01, POPL'00, LOP-STR'00, CMPP'00, ESOP'00, ECAI'00 CLPWS, PPDP'99, FLOPS'99, PADL'99, Irregular'99, POPL'97, ICLP'97, DPLE'97, CP'95, Europar'95, PARLE'93, GULP-PRODE'92-94, PLILP'93-95, JICSLP'92, PAP'91, NACLP'90, ICLP'90, ICLP'89. **Session chairman** and **panelist** at several conferences and workshops.

- **Member** of ISTAG, the High-level Advisory Group of the Information Society Technologies Research Program (IST) of the European Union for Framework Program VI (2002-2006). President of several working groups. Co-authored several "white books" and policy reports (not included in publications list).

- **Area Coordinator** (parallelism and implementation technologies) of the EU Networks of Excellence in Computational Logic COMPULOG and CoLogNet.

- **Panel Member** ACM 50th Anniversary Workshop on Future Directions in Computer Science, the ALP Strategic Directions Meeting, and at several EU Vth, VIth, and VIIth Framework Program strategic planning meetings ("New Directions for ICTs in FP7 meeting: Grand challenges for basic research," "Next Generation GRIDs," "Global Computing," "Future Software Systems," "Advanced Embedded Systems," etc.).

- **Invited speaker** at the Danish EU presidency high-level meeting on the need for a European Research Council.

- **Acted as scientific expert**, at Spanish Senate hearings, on software patents and open source software. Expert and National Representative for the OECD on Dissemination of Scientific Data and Results.

- **Elected President** of the *Association for Logic Programming* (ALP). **Elected member** of the steering board of the *European Association for Programming Languages and Systems* (EAPLS) and (twice) of the ALP. Member of the Steering Committee of *ACM Principles of Programming Languages (POPL)*, the *Principles and Practice of Declarative Programming (PPDP)*, and the *Federated Logic (FLoC)* conference series.

- **Best paper award**, at ICLP 2005 (with José Morales, Manuel Carro, and Germán Puebla).

- Served on **tenure and promotion committees** or as a **department evaluator** for the University of Copenhagen (DIKU), T.U. Denmark (TUD), Cambridge U. (U.K.), Cyprus U., INRIA (France), Ecole Normale Superieure (France), U. of Porto (Portugal), U. of Melbourne (Australia), New Mexico State U. (USA), Ecole Polytechnique (France), Negev U. (Israel), etc. and several Spanish universities. **President** of the Spanish national **research performance evaluation commission** for the areas of Computer Science and Electronics (CNEAI).

- **Invited Lecturer**, October 1996, in the distinguished visitor lecture series of New Mexico State University. Former **lecturer** on the *"IEEE Computer Society Distinguished Visitor Program"*.

- **Invited Scientist**, August-September 1988, at the Japanese Institute for fifth generation computing (ICOT) in Tokyo.

- **Developed a number or practical systems**, which are in the public domain, some of them with 10's of thousands of users, including the Ciao programming system, CiaoPP, LP-doc, the PiLLoW library, CP analyzers, PLAI, automatic parallelizers, &-Prolog, VisAndOr, etc.

- Participated in more than 40 research projects, in most of them as principal investigator, funded by the European Union and the Spanish Ministries, as well as NSF, MITI, etc. Also in several projects funded by industry.

- **Referee** for several journals (TOPLAS, Computing Reviews, TCS, TPLP/JLP, JSC, JPDC, FGCS, TODS, LOPLAS, IJPP, IEEE-TSE, JFGC, COMPLANG, JFLP, etc.), and conferences (POPL, SAS, IJCAI, ICLP, SLP, ILPS, PPDP, NACLP, JICSLP, ICPP, DCS, CON-PAR, CP, ESOP, EUMAS, PAP, PARLE, PLILP, ALP, POPL, WSA, EUROPAR, GULP, ICALP, ICPA, PODS, ASIAN, CAEPIA, PACT, PASCO, PPSWR, etc.).

- **Evaluator** and panel member for several institutions: EU (ESPRIT, IST FP IV, V, VI), NSF, DARPA, DoD, ICOT, ISF, FULBRIGHT, the Australian, Belgian, Danish, Swedish, Spanish, and UK funding agencies, etc.

- **Faculty Adviser** for the ACM student chapter of the T.U. of Madrid.

- **Fulbright-Hays Scholarship** for Graduate Study in the U.S. (1983-84). **U. of Texas Graduate Research Grant** (1984-85). **MCC Graduate Research Grant** (1985-86).

- **Professional Societies** ACM, IEEE (Computer Society), ALP (Assoc. for Logic Programming), EAPLS, ATI (Professional Computer Engineers' Assoc. of Spain), among others.

- **Member** of the Tau Beta Pi Engineering Honor Society.

Recent Collaborators and Students:

Graduated Ph.D. Students (+ graduating university/current location):

Kalyan Muthukumar (U.T. Austin/IBM San Jose / Apple research), Yow-Yan Lin (UT Austin/Bellcore), María García de la Banda (T.U. Madrid/Melbourne University), Francisco Bueno (T.U. Madrid), Germán Puebla (T.U. Madrid), Pedro López García (T.U. Madrid), Manuel Carro (T.U. Madrid), Daniel Cabeza Gras (T.U. Madrid), Jorge Navas (U. of New Mexico/U. of Singapore), Amadeo Casas (U. of New Mexico/Microsoft), Mario Méndez (U. of New Mexico/U.T. Austin).

Most recent collaborators (outside UPM and UNM):

J. Gallagher (U. of Roskilde, Denmark), P. Stuckey (Melbourne U., Australia), K. Marriott (Monash U., Australia), E. Pontelli (New Mexico S.U., USA), G. Gupta (New Mexico S.U., USA), S. Debray (U. of Arizona, USA), U. Montanari (U. Pisa, Italy), F. Rossi (U. Pisa, Italy), Giorgio Levi (U. Pisa, Italy), K. Shen (Imperial College, UK), M. Codish (Ben Gurion U., Israel), M. Bruynooghe (K.U. Leuven, Belgium), P. Deransart (INRIA, France), J. Maluszynski (Linkoping U., Sweden), Per Cederberg (Ericsson, Sweden).

Personal data:

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Publications (in reverse chronological order, and classified by venue category):

Publications are classified according to four ranking databases: JCR[1] (using for each publication venue the average position in the list in 1998-2006), the CORE[2] listings, the CiteSeer[3] impact listings (see also the upgraded CiteSeerX listing) and the CS Conference Rankings.[4] Each of these databases (except CORE) maps venues to a number between 0 and 1 (or 0 and 100%) which corresponds to the position of the corresponding venue divided by the total number of ranked venues (the lower the position the better). CORE classifies venues, instead, into four discrete ranking categories: A+, A, B and C. In order to have a numerical figure with which to compare to the other databases and be able to compute an average value, we have mapped CORE's A+ to top 10%, A to 33%, B to 66% and C to 100%. We obtain an overall numerical ranking for each publication as the extbfaverage of all *available* rankings for the corresponding venue (some venues do not appear in all ranking databases). Finally, publications are classified according to this average. Publications with average ranking 0-33% are considered as **first level**, 33-66% are considered as **second level** and the rest are considered as **third level**. In the listings, for each publication we report the individual rankings available for the corresponding venue, as well as the global average position, in the form of a percentage.

Articles in First-Level Refereed Conferences and Journals

1. E. Mera, P. López-García, M. Hermenegildo. *Integrating Software Testing and Run-Time Checking in an Assertion Verification Framework.* International Conference on Logic Programming (ICLP), LNCS, Vol. 5649, pages 281–295, Springer-Verlag, July 2009.

   CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

2. P. Chico de Guzmán, M. Carro, Manuel V. Hermenegildo. *A Tabling Implementation Based on Variables with Multiple Bindings.* International Conference on Logic Programming (ICLP), LNCS, 15 pages, Springer-Verlag, July 2009. To appear.

   CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

3. P. Chico de Guzmán, M. Carro, M. 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.

   CORE: A. Citeseer: 351/1221 (28%), impact 0.87. CS Conf Rankings: 0.88. Average position: top 24%.

4. E. Trias, J. Navas, E. S. Ackley, S. Forrest, M. Hermenegildo. *Negative Ternary Set-Sharing.* International Conference on Logic Programming, ICLP, LNCS, Num. 5366, pages 301–316, Springer-Verlag, December 2008.

   CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

5. P. Chico de Guzmán, M. Carro, Manuel 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.

   CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

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[1] `http://portal.isiknowledge.com`
[2] `http://www.core.edu.au/`
[3] `http://citeseer.ist.psu.edu/impact.html`
[4] `http://www.cs-conference-ranking.org/conferencerankings/alltopics.html`

6. A. Casas, M. Carro, M. 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.

   CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

7. M. Marron, M. 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.

   CORE: A. Citeseer: 370/1221 (30%), impact 0.83. CS Conf Rankings: 0.95. Average position: top 22%.

8. M. Méndez-Lojo, M. 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.

   CORE: A. Average position: top 33%.

9. P. Chico de Guzmán, M. Carro, M. 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.

   CORE: A. Citeseer: 351/1221 (28%), impact 0.87. CS Conf Rankings: 0.88. Average position: top 24%.

10. A. Casas, M. Carro, M. Hermenegildo. *Towards a High-Level Implementation of Execution Primitives for Non-restricted, Independent And-parallelism.* 10th International Symposium on Practical Aspects of Declarative Languages (PADL'08), LNCS, Vol. 4902, pages 230–247, Springer-Verlag, January 2008.

    CORE: A. Citeseer: 351/1221 (28%), impact 0.87. CS Conf Rankings: 0.88. Average position: top 24%.

11. P. Pietrzak, J. Correas, G. Puebla, M. 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.

    CORE: A. Citeseer: 65/1221 (5%), impact 1.47. CS Conf Rankings: 0.91. Average position: top 15%.

12. J. Navas, E. Mera, P. López-García, M. Hermenegildo. *User-Definable Resource Bounds Analysis for Logic Programs.* International Conference on Logic Programming (ICLP), LNCS, Vol. 4670, pages 348–363, Springer-Verlag, September 2007.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

13. P. Pietrzak, M. 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.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

14. E. Mera, P. López-García, G. Puebla, M. Carro, M. Hermenegildo. *Combining Static Analysis and Profiling for Estimating Execution Times.* Ninth International Symposium on Practical Aspects of Declarative Languages, LNCS, Num. 4354, pages 140–154, Springer-Verlag, January 2007.

    CORE: A. Citeseer: 351/1221 (28%), impact 0.87. CS Conf Rankings: 0.88. Average position: top 24%.

15. M. Marron, D. Kapur, D. Stefanovic, M. 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.

    Citeseer: 186/1221 (15%), impact 1.22. Average position: top 15%.

16. E. Mera, P. López-García, G. Puebla, M. Carro, M. Hermenegildo. *Using Combined Static Analysis and Profiling for Logic Program Execution Time Estimation.* 22nd International Conference on Logic Programming (ICLP 2006), LNCS, Num. 4079, pages 431–432, Springer-Verlag, August 2006.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

17. G. Puebla, E. Albert, M. Hermenegildo. *Abstract Interpretation with Specialized Definitions.* The 13th International Static Analysis Symposium (SAS'06), LNCS, Num. 4134, pages 107–126, Springer, August 2006.

    CORE: A. Citeseer: 145/1221 (11%), impact 1.35. CS Conf Rankings: 0.9. Average position: top 18%.

18. E. Albert, P. Arenas, G. Puebla, M. 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.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

19. J. Navas, F. Bueno, M. Hermenegildo. *Efficient top-down set-sharing analysis using cliques.* Eight International Symposium on Practical Aspects of Declarative Languages, LNCS, Num. 2819, pages 183–198, Springer-Verlag, January 2006.

    CORE: A. Citeseer: 351/1221 (28%), impact 0.87. CS Conf Rankings: 0.88. Average position: top 24%.

20. M. Hermenegildo, G. Puebla, F. Bueno, P. López-García. *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 Science, October 2005.

    JCR: position (ave) top 39%, impact (ave) 0.77, subject(s): COMPUTER SCIENCE, SOFTWARE, GRAPHICS, PROGRAMMING. COMPUTER SCIENCE, SOFTWARE, GRAPHICS, PROGRAMMING – CORE: A. Citeseer: 185/1221 (15%), impact 1.22. Average position: top 29%.

21. J. Morales, M. Carro, G. Puebla, M. 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.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

22. G. Puebla, E. Albert, M. 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.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

23. E. Albert, G. Puebla, M. 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.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

24. J. Morales, M. Carro, M. 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.

    CORE: A. Citeseer: 351/1221 (28%), impact 0.87. CS Conf Rankings: 0.88. Average position: top 24%.

25. J. Correas, J. M. Gomez, M. Carro, D. Cabeza, M. 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.

    CORE: A. Citeseer: 351/1221 (28%), impact 0.87. CS Conf Rankings: 0.88. Average position: top 24%.

26. J. Correas, J. M. Gomez, M. Carro, D. Cabeza, M. 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.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

27. S. Muñoz, J.J. Moreno-Navarro, M. Hermenegildo. *Efficient Negation Using Abstract Interpretation.* Proc. of the Eigth International Conference on Logic Programming and Automated Reasoning, LNAI, 15 pages, Springer-Verlag, December 2001.

    CORE: A. Citeseer: 469/1221 (38%), impact 0.69. Average position: top 35%.

28. G. Gupta, E. Pontelli, K. Ali, M. Carlsson, M. 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.

    JCR: position (ave) top 19%, impact (ave) 1.26, subject(s): COMPUTER SCIENCE, SOFTWARE ENGINEERING. COMPUTER SCIENCE, SOFTWARE ENGINEERING – CORE: A+. Citeseer: 41/1221 (3%), impact 1.92. Average position: top 10%.

29. M. García de la Banda, M. 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.

    JCR: position (ave) top 19%, impact (ave) 1.26, subject(s): COMPUTER SCIENCE, SOFTWARE ENGINEERING. COMPUTER SCIENCE, SOFTWARE ENGINEERING – CORE: A+. Citeseer: 41/1221 (3%), impact 1.92. Average position: top 10%.

30. M. 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.

    JCR: position (ave) top 19%, impact (ave) 1.26, subject(s): COMPUTER SCIENCE, SOFTWARE ENGINEERING. COMPUTER SCIENCE, SOFTWARE ENGINEERING – CORE: A+. Citeseer: 41/1221 (3%), impact 1.92. Average position: top 10%.

31. M. Carro, M. 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.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

32. G. Puebla, M. 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.

JCR: position (ave) top 19%, impact (ave) 0.98, subject(s): COMPUTER SCIENCE, THEORY & METHODS. COMPUTER SCIENCE, THEORY & METHODS – CORE: U. Citeseer: 56/1221 (4%), impact 1.78. Average position: top 11%.

33. F. Bueno, M. García de la Banda, M. 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.

    JCR: position (ave) top 19%, impact (ave) 1.26, subject(s): COMPUTER SCIENCE, SOFTWARE ENGINEERING. COMPUTER SCIENCE, SOFTWARE ENGINEERING – CORE: A+. Citeseer: 41/1221 (3%), impact 1.92. Average position: top 10%.

34. K. Muthukumar, F. Bueno, M. García de la Banda, M. 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.

    JCR: position (ave) top 19%, impact (ave) 0.98, subject(s): COMPUTER SCIENCE, THEORY & METHODS. COMPUTER SCIENCE, THEORY & METHODS – CORE: U. Citeseer: 56/1221 (4%), impact 1.78. Average position: top 11%.

35. G. Puebla, F. Bueno, M. 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.

    CORE: A. Citeseer: 268/1221 (21%), impact 1.04. CS Conf Rankings: 0.96. Average position: top 19%.

36. F. Bueno, M. 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.

    JCR: position (ave) top 39%, impact (ave) 0.77, subject(s): COMPUTER SCIENCE, SOFTWARE, GRAPHICS, PROGRAMMING. COMPUTER SCIENCE, SOFTWARE, GRAPHICS, PROGRAMMING – CORE: A. Citeseer: 185/1221 (15%), impact 1.22. Average position: top 29%.

37. M. Codish, M. Bruynooghe, M. García de la Banda, M. 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.

    JCR: position (ave) top 19%, impact (ave) 0.98, subject(s): COMPUTER SCIENCE, THEORY & METHODS. COMPUTER SCIENCE, THEORY & METHODS – CORE: U. Citeseer: 56/1221 (4%), impact 1.78. Average position: top 11%.

38. S.K. Debray, P. López-García, M. Hermenegildo. *Non-Failure Analysis for Logic Programs.* 1997 International Conference on Logic Programming, pages 48–62, MIT Press, Cambridge, MA, June 1997.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

39. P. Van Hentenryck, V. Saraswat, A. Borning, A. Brodski, P. Codognet, R. Dechter, M. Dincbas, E. Freuder, M. 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.

    JCR: position (ave) top 13%, impact (ave) 3.92, subject(s): COMPUTER SCIENCE, THEORY & METHODS. COMPUTER SCIENCE, THEORY & METHODS – Citeseer: 195/1221 (15%), impact 1.19. Average position: top 14%.

40. M. García de la Banda, M. 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.

    JCR: position (ave) top 19%, impact (ave) 1.26, subject(s): COMPUTER SCIENCE, SOFTWARE ENGINEERING. COMPUTER SCIENCE, SOFTWARE ENGINEERING – CORE: A+. Citeseer: 41/1221 (3%), impact 1.92. Average position: top 10%.

41. F. Bueno, D. Cabeza, M. Hermenegildo, G. Puebla. *Global Analysis of Standard Prolog Programs.* European Symposium on Programming, LNCS, Num. 1058, pages 108–124, Springer-Verlag, April 1996.

    CORE: A. Citeseer: 87/1221 (7%), impact 1.58. CS Conf Rankings: 0.92. Average position: top 16%.

42. M. 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.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

43. M. Hermenegildo, G. Puebla, K. Marriott, P. Stuckey. *Incremental Analysis of Logic Programs.* International Conference on Logic Programming, pages 797–811, MIT Press, June 1995.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

44. G. Puebla, M. 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.

    CORE: A. Citeseer: 65/1221 (5%), impact 1.47. CS Conf Rankings: 0.91. Average position: top 15%.

45. P. López-García, M. Hermenegildo. *Efficient Term Size Computation for Granularity Control.* International Conference on Logic Programming, pages 647–661, MIT Press, Cambridge, MA, June 1995.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

46. M. Codish, A. Mulkers, M. Bruynooghe, M. García de la Banda, M. Hermenegildo. *Improving Abstract Interpretations by Combining Domains.* ACM Transactions on Programming Languages and Systems, Vol. 17, Num. 1, pages 28–44, ACM, January 1995.

    JCR: position (ave) top 19%, impact (ave) 1.26, subject(s): COMPUTER SCIENCE, SOFTWARE ENGINEERING. COMPUTER SCIENCE, SOFTWARE ENGINEERING – CORE: A+. Citeseer: 41/1221 (3%), impact 1.92. Average position: top 10%.

47. M. 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.

    JCR: position (ave) top 19%, impact (ave) 0.98, subject(s): COMPUTER SCIENCE, THEORY & METHODS. COMPUTER SCIENCE, THEORY & METHODS – CORE: U. Citeseer: 56/1221 (4%), impact 1.78. Average position: top 11%.

48. F. Bueno, M. García de la Banda, M. Hermenegildo. *Effectiveness of Global Analysis in Strict Independence-Based Automatic Program Parallelization.* International Symposium on Logic Programming, pages 320–336, MIT Press, November 1994.

    CORE: A. Citeseer: 85/1221 (6%), impact 1.61. CS Conf Rankings: 0.97. Average position: top 14%.

49. D. Cabeza, M. 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.

    CORE: A. Citeseer: 145/1221 (11%), impact 1.35. CS Conf Rankings: 0.9. Average position: top 18%.

50. C. Carreras, C. López-Barrio, M. 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.

    Citeseer: 163/1221 (13%), impact 1.26. Average position: top 13%.

51. M. Codish, M. García de la Banda, M. Bruynooghe, M. 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.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

52. G. Gupta, M. 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.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

53. U. Montanari, F. Rossi, F. Bueno, M. García de la Banda, M. 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.

    CORE: A. Citeseer: 268/1221 (21%), impact 1.04. CS Conf Rankings: 0.96. Average position: top 19%.

54. M. 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.

    CORE: A. Citeseer: 268/1221 (21%), impact 1.04. CS Conf Rankings: 0.96. Average position: top 19%.

55. K. Marriott, M. García de la Banda, M. Hermenegildo. *Analyzing Logic Programs with Dynamic Scheduling.* 20th. Annual ACM Conf. on Principles of Programming Languages, pages 240–254, ACM, January 1994.

    CORE: A+. Citeseer: 13/1221 (1%), impact 2.26. CS Conf Rankings: 0.99. Average position: top 4%.

56. M. García de la Banda, M. Hermenegildo. *A Practical Approach to the Global Analysis of Constraint Logic Programs.* 1993 International Logic Programming Symposium, pages 437–455, MIT Press, October 1993.

    CORE: A. Citeseer: 85/1221 (6%), impact 1.61. CS Conf Rankings: 0.97. Average position: top 14%.

57. M. García de la Banda, M. Hermenegildo, K. Marriott. *Independence in Constraint Logic Programs.* 1993 International Logic Programming Symposium, pages 130–146, MIT Press, Cambridge, MA, October 1993.

    CORE: A. Citeseer: 85/1221 (6%), impact 1.61. CS Conf Rankings: 0.97. Average position: top 14%.

58. M. Codish, A. Mulkers, M. Bruynooghe, M. García de la Banda, M. 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.

    CORE: A. Citeseer: 65/1221 (5%), impact 1.47. CS Conf Rankings: 0.91. Average position: top 15%.

59. M. Carro, L. Gómez, M. Hermenegildo. *Some Paradigms for Visualizing Parallel Execution of Logic Programs.* 1993 International Conference on Logic Programming, pages 184–201, MIT Press, June 1993.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

60. M. 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.

    JCR: position (ave) top 19%, impact (ave) 0.98, subject(s): COMPUTER SCIENCE, THEORY & METHODS. COMPUTER SCIENCE, THEORY & METHODS – CORE: U. Citeseer: 56/1221 (4%), impact 1.78. Average position: top 11%.

61. K. Muthukumar, M. 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.

    JCR: position (ave) top 19%, impact (ave) 0.98, subject(s): COMPUTER SCIENCE, THEORY & METHODS. COMPUTER SCIENCE, THEORY & METHODS – CORE: U. Citeseer: 56/1221 (4%), impact 1.78. Average position: top 11%.

62. G. Gupta, M. 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.

    Citeseer: 359/1221 (29%), impact 0.85. Average position: top 29%.

63. F. Bueno, M. 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.

    Citeseer: 359/1221 (29%), impact 0.85. Average position: top 29%.

64. K. Shen, M. Hermenegildo. *A Simulation Study of Or- and Independent And-parallelism.* International Logic Programming Symposium, pages 135–151, MIT Press, October 1991.

    CORE: A. Citeseer: 85/1221 (6%), impact 1.61. CS Conf Rankings: 0.97. Average position: top 14%.

65. G. Gupta, V. Santos-Costa, R. Yang, M. Hermenegildo. *IDIOM: Integrating Dependent And-, Independent And-, and Or-parallelism.* 1991 International Logic Programming Symposium, pages 152–166, MIT Press, October 1991.

    CORE: A. Citeseer: 85/1221 (6%), impact 1.61. CS Conf Rankings: 0.97. Average position: top 14%.

66. K. Muthukumar, M. 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.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

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

    CORE: A+. Citeseer: 3/1221 (0%), impact 2.89. CS Conf Rankings: 0.98. Average position: top 4%.

68. K. Muthukumar, M. 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.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

69. M. 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.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

70. M. Hermenegildo, K. Greene. *&-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.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

71. K. Muthukumar, M. 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.

    CORE: A. Citeseer: 138/1221 (11%), impact 1.38. Average position: top 22%.

72. M. 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.

    CORE: A. Citeseer: 138/1221 (11%), impact 1.38. Average position: top 22%.

73. K. Muthukumar, M. 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.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

74. M. 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.

    CORE: A. Citeseer: 313/1221 (25%), impact 0.95. CS Conf Rankings: 0.61. Average position: top 32%.

75. R. Warren, M. 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.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

76. M. 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.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

77. M. 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.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

78. M. 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.

    CORE: A. Citeseer: 118/1221 (9%), impact 1.47. CS Conf Rankings: 0.97. Average position: top 15%.

79. G. J. Lipovski, M. 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.

    CORE: A. Citeseer: 313/1221 (25%), impact 0.95. CS Conf Rankings: 0.61. Average position: top 32%.

Articles in Second-Level Refereed Conferences and Journals

1. M. Marron, D. Kapur, M. Hermenegildo. *Identification of Logically Related Heap Regions.* ISMM'09: Proceedings of the 8th international symposium on Memory management, ACM Press, June 2009.

    CORE: B. Citeseer: 117/1221 (9%), impact 1.47. Average position: top 37%.

2. D. Cabeza, M. Hermenegildo. *Non-Strict Independence-Based Program Parallelization Using Sharing and Freeness Information.* Theoretical Computer Science, To Appear, Elsevier Science, 2009.

    JCR: position (ave) top 60%, impact (ave) 0.57, subject(s): COMPUTER SCIENCE, THEORY & METHODS. COMPUTER SCIENCE, THEORY & METHODS – CORE: A. Citeseer: 338/1221 (27%), impact 0.91. Average position: top 40%.

3. M. Marron, M. Méndez-Lojo, M. 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.

    CORE: B. Citeseer: 235/1221 (19%), impact 1.1. Average position: top 42%.

4. J. Morales, M. Carro, M. 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.

    CORE: B. Citeseer: 421/1221 (34%), impact 0.75. Average position: top 50%.

5. E. Mera, P. López-García, M. Carro, M. 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.

    CORE: B. Citeseer: 421/1221 (34%), impact 0.75. Average position: top 50%.

6. E. Albert, G. Puebla, M. Hermenegildo. *Abstraction-Carrying Code: A Model for Mobile Code Safety.* New Generation Computing, Vol. 26, Num. 2, pages 171–204, March 2008.

7. A. Casas, M. Carro, M. 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.

    CORE: B. Citeseer: 363/1221 (29%), impact 0.85. CS Conf Rankings: 0.72. Average position: top 41%.

8. J.F. Morales, M. Carro, M. 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.

   CORE: B. Citeseer: 363/1221 (29%), impact 0.85. CS Conf Rankings: 0.72. Average position: top 41%.

9. M. Marron, D. Stefanovic, M. 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.

   CORE: B. Citeseer: 235/1221 (19%), impact 1.1. Average position: top 42%.

10. P. Pietrzak, J. Correas, G. Puebla, M. 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.

    CORE: A. Citeseer: 469/1221 (38%), impact 0.69. Average position: top 35%.

11. M. Carro, J. Morales, H.L. Muller, G. Puebla, M. 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.

    CORE: A. Citeseer: 618/1221 (50%), impact 0.5. CS Conf Rankings: 0.81. Average position: top 34%.

12. A. Casas, D. Cabeza, M. 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.

    CORE: A. Citeseer: 468/1221 (38%), impact 0.69. Average position: top 35%.

13. C. Ochoa, G. Puebla, M. 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.

    CORE: B. Citeseer: 363/1221 (29%), impact 0.85. CS Conf Rankings: 0.72. Average position: top 41%.

14. J. Correas, G. Puebla, M. 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.

    CORE: B. Citeseer: 363/1221 (29%), impact 0.85. CS Conf Rankings: 0.72. Average position: top 41%.

15. G. Puebla, E. Albert, M. 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.

    CORE: B. Citeseer: 363/1221 (29%), impact 0.85. CS Conf Rankings: 0.72. Average position: top 41%.

16. P. López-García, F. Bueno, M. 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.

    CORE: B. Citeseer: 363/1221 (29%), impact 0.85. CS Conf Rankings: 0.72. Average position: top 41%.

17. D. Cabeza, M. 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.

    CORE: B. Citeseer: 803/1221 (65%), impact 0.29. Average position: top 65%.

18. E. Albert, G. Puebla, M. 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.

    CORE: B. CS Conf Rankings: 0.55. Average position: top 55%.

19. F. Bueno, P. López-García, M. 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.

    CORE: A. Citeseer: 468/1221 (38%), impact 0.69. Average position: top 35%.

20. D. Cabeza, M. 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.

    JCR: position (ave) top 31%, impact (ave) 1.23, subject(s): COMPUTER SCIENCE, SOFTWARE ENGINEERING. COMPUTER SCIENCE, SOFTWARE ENGINEERING – CORE: A. Citeseer: 494/1221 (40%), impact 0.66. Average position: top 34%.

21. F. Bueno, M. García de la Banda, M. 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.

    CORE: B. Citeseer: 363/1221 (29%), impact 0.85. CS Conf Rankings: 0.72. Average position: top 41%.

22. M. 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.

    JCR: position (ave) top 47%, impact (ave) 0.68, subject(s): COMPUTER SCIENCE, THEORY & METHODS. COMPUTER SCIENCE, THEORY & METHODS – CORE: A. Citeseer: 519/1221 (42%), impact 0.63. Average position: top 40%.

23. C. Carreras, M. Hermenegildo. *Grid-based Histogram Arithmetic for the Probabilistic Analysis of Functions.* Symposium on Abstraction, Reformulation and Approximation (SARA-2000), LNAI, Springer-Verlag, July 2000.

    CORE: A. Citeseer: 531/1221 (43%), impact 0.62. Average position: top 38%.

24. D. Cabeza, M. Hermenegildo. *A New Module System for Prolog.* International Conference on Computational Logic, CL2000, LNAI, Num. 1861, pages 131–148, Springer-Verlag, July 2000.

    Citeseer: 541/1221 (44%), impact 0.59. Average position: top 44%.

25. M. Hermenegildo. *A Documentation Generator for (C)LP Systems.* International Conference on Computational Logic, CL2000, LNAI, Num. 1861, pages 1345–1361, Springer-Verlag, July 2000.

    Citeseer: 541/1221 (44%), impact 0.59. Average position: top 44%.

26. G. Puebla, F. Bueno, M. 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.

    CORE: B. Citeseer: 363/1221 (29%), impact 0.85. CS Conf Rankings: 0.72. Average position: top 41%.

27. G. Puebla, M. Hermenegildo. *Abstract Specialization and its Application to Program Parallelization.* Logic Program Synthesis and Transformation, LNCS, Num. 1207, pages 169–186, Springer-Verlag, 1997.

    CORE: B. Citeseer: 363/1221 (29%), impact 0.85. CS Conf Rankings: 0.72. Average position: top 41%.

28. M. 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.

    JCR: position (ave) top 59%, impact (ave) 0.74, subject(s): COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE. COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE – CORE: U. Citeseer: 327/1221 (26%), impact 0.93. Average position: top 42%.

29. M. García de la Banda, F. Bueno, M. Hermenegildo. *Towards Independent And-Parallelism in CLP.* Programming Languages: Implementation, Logics, and Programs, LNCS, Num. 1140, pages 77–91, Springer-Verlag, September 1996.

    CORE: B. Citeseer: 297/1221 (24%), impact 0.99. CS Conf Rankings: 0.73. Average position: top 39%.

30. M. García de la Banda, M. 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.

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31. G. Puebla, M. Hermenegildo. *Automatic Optimization of Dynamic Scheduling in Logic Programs.* Programming Languages: Implementation, Logics, and Programs, LNCS, Num. 1140, Springer-Verlag, September 1996. Poster abstract.

    CORE: B. Citeseer: 297/1221 (24%), impact 0.99. CS Conf Rankings: 0.73. Average position: top 39%.

32. K. Shen, M. 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.

    CORE: A. Citeseer: 491/1221 (40%), impact 0.67. Average position: top 36%.

33. M. Fernández, M. Carro, M. 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.

    CORE: A. Citeseer: 491/1221 (40%), impact 0.67. Average position: top 36%.

34. M. 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.

    JCR: position (ave) top 74%, impact (ave) 0.31, subject(s): COMPUTER SCIENCE, SOFTWARE, GRAPHICS, PROGRAMMING. COMPUTER SCIENCE, SOFTWARE, GRAPHICS, PROGRAMMING – Citeseer: 630/1221 (51%), impact 0.49. Average position: top 62%.

35. E. Pontelli, G. Gupta, D. Tang, M. Carro, M. 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.

    JCR: position (ave) top 74%, impact (ave) 0.31, subject(s): COMPUTER SCIENCE, SOFTWARE, GRAPHICS, PROGRAMMING. COMPUTER SCIENCE, SOFTWARE, GRAPHICS, PROGRAMMING – Citeseer: 630/1221 (51%), impact 0.49. Average position: top 62%.

36. P. López-García, M. 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.

    JCR: position (ave) top 49%, impact (ave) 0.62, subject(s): COMPUTER SCIENCE, THEORY & METHODS. COMPUTER SCIENCE, THEORY & METHODS – CORE: B. Citeseer: 362/1221 (29%), impact 0.85. Average position: top 48%.

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    JCR: position (ave) top 84%, impact (ave) 0.29, subject(s): COMPUTER SCIENCE, THEORY & METHODS. COMPUTER SCIENCE, THEORY & METHODS – CORE: A. Citeseer: 409/1221 (33%), impact 0.77. Average position: top 50%.

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    CORE: B. Citeseer: 584/1221 (47%), impact 0.54. Average position: top 56%.

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41. F. Bueno, M. García de la Banda, M. Hermenegildo. *A Comparative Study of Methods for Automatic Compile-time Parallelization of Logic Programs.* First International Symposium on Parallel Symbolic Computation, PASCO'94, pages 63–73, World Scientific Publishing Company, September 1994.

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49. A. Guzmán, M. Hermenegildo. *Constructs and Evaluation Strategies for Intelligent Speculative Parallelism – Armageddon Revisited.* 1988 ACM Computer Science Conference, pages 106–115, ACM, February 1988.

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1. J. Garrigue, M. Hermenegildo. *Functional and Logic Programming, 9th International Symposium, FLOPS'08.* LNCS, Num. 4989, Springer, April 2008.

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3. M. Hermenegildo, D. Cabeza. *Practical Aspects of Declarative Languages – 7th. International Symposium, PADL 2005.* LNCS, Num. 3350, 278 pages, Springer-Verlag, January 2005.

4. M. Hermenegildo, G. Puebla. *Static Analysis – 9th. International Symposium.* LNCS, Num. 2477, 528 pages, Springer-Verlag, September 2002.

5. L. Sterling, L. Naish, M. 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.

6. P. Deransart, M. Hermenegildo, J. Maluszynski. *Analysis and Visualization Tools for Constraint Programming.* LNCS, Num. 1870, 350 pages, Springer-Verlag, September 2000.

7. P. Tarau, K. De Bosschere, M. Hermenegildo. *Proceedings of the 2nd Workshop on Logic Programming Tools for INTERNET Applications.* 140 pages, K.U. Leuven, July 1997. Available from `http://www.cliplab.org/lpnet/proceedings97/index.html`.

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12. M. Hermenegildo, J. Penjam. *Programming Language Implementation and Logic Programming – Proc. of the 1994 Conference.* LNCS, Num. 844, 468 pages, Springer-Verlag, September 1994.

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15. M. Hermenegildo, J. Moreno-Navarro. *Actas del Primer Congreso Nacional de Programaci'on Declarativa.* 398 pages, FIM/UPM, Madrid, Spain, September 1992.

16. S. K. Debray, M. Hermenegildo. *Logic Programming – Proc. of the North American Conference.* 850 pages, MIT Press, Cambridge, MA, October 1990.

17. M. Hermenegildo. *Proc. of the Workshop on Future Directions in Logic Programming.* 210 pages, MCC, Austin, TX, April 1987.

18. M. 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.

19. M. 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.

Invited Papers and Tutorials

1. G. Puebla, E. Albert, P. Arenas, M. Hermenegildo. *On Abstraction-Carrying Code and Certificate-Size Reduction.* 1st International Workshop on Emerging Applications of Abstract Interpretation (EAAI 2006), 15 pages, March 2006.

2. G. Puebla, E. Albert, M. 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.

3. M. Hermenegildo, E. Albert, P. López-García, G. Puebla. *Abstraction Carrying Code and Resource-Awareness.* Proc. of 7th ACM-SIGPLAN International Symposium on Principles and Practice of Declarative Programming (PPDP'05), 11 pages, ACM Press, July 2005.

4. M. Hermenegildo, E. Albert, P. López-García, 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.

5. G. Puebla, M. 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. Hermenegildo, G. Puebla, F. Bueno, P. López-García. *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. Hermenegildo, G. Puebla, F. Bueno, P. López-García. *Abstract Verification and Debugging of Constraint Logic Programs.* Recent Advances in Constraints, LNCS, Num. 2627, pages 1–14, Springer-Verlag, January 2003.

8. M. Hermenegildo, F. Bueno, G. Puebla, P. López-García. *Program Debugging and Validation Using Semantic Approximations and Partial Specifications.* 29 th. International Colloqium on Automata, Languages, and Programming (ICALP), LNCS, Num. 2380, pages 69–72, Springer-Verlag, July 2002.

9. M. 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).

10. F. Bueno, D. Cabeza, M. Carro, J. Correas, J. Gómez, M. Hermenegildo, P. López, 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.

11. M. Hermenegildo, F. Bueno, G. Puebla, P. López-García. *Program Analysis, Debugging and Optimization Using the Ciao System Preprocessor.* 1999 Int'l. Conference on Logic Programming, pages 52–66, MIT Press, November 1999.

12. M. Hermenegildo, The CLIP Group. *Programming with Global Analysis.* Proceedings of ILPS'97, pages 49–52, MIT Press, October 1997. (abstract of invited talk).

13. M. 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. F. Bueno, P. Deransart, W. Drabent, G. Ferrand, M. 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.

15. M. Hermenegildo, G. Puebla. *Applying Multiple Abstract Specialization to Program Parallelization (abstract).* Partial Evaluation– Dagstuhl Seminar Report, Num. 134, 1 pages, IBFI – Dagstuhl, February 1996.

16. S.K. Debray, P. López-García, M. 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.

17. M. García de la Banda, M. 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. M. V. Hermenegildo, F. Bueno, M. Carro, P. López, 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, Num. 5065, pages 209–237, Springer-Verlag, June 2008.

2. G. Puebla, J. Correas, M. 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.

3. M. Carro, M. Hermenegildo. *Visualization Designs for Constraint Logic Programming.* Vol. 2, Num. 2, pages 27–34, Swiss Informatics Societies, April 2001. Also in UPGRADE. Available through http://www.svifsi.ch/revue/.

4. M. Carro, M. Hermenegildo. *Diseño de visualizaciones para programación lógica con restricciones.* Num. 150, pages 31–37, Asociación de Técnicos en Informática, March 2001.

5. M. Carro, M. 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.

6. G. Puebla, F. Bueno, M. 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. 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. P. Deransart, M. 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.

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11. M. Hermenegildo, F. Bueno, D. Cabeza, M. Carro, M. García de la Banda, P. López-García, 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.

12. K. Shen, M. Hermenegildo. *Divided We Stand: Parallel Distributed Stack Memory Management.* Implementations of Logic Programming Systems, pages 185–203, Kluwer Academic Publishers, 1994.

13. M. 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.

14. M. 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.

15. M. 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.

Articles in Third-Level (or Non-Indexed) Refereed Conferences and Journals

1. M. Méndez-Lojo, J. Navas, M. 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), Num. 4915, pages 154–168, LNCS, August 2007.

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2. E. Albert, G. Puebla, M. 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.

   CORE: A. Citeseer: 469/1221 (38%), impact 0.69. Average position: top 35%.

3. G. Smedbäck, M. Carro, M. 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.

   CORE: C. Average position: top 100%.

4. G. Puebla, M. Hermenegildo. *Optimized Algorithms for the Incremental Analysis of Logic Programs.* International Static Analysis Symposium (SAS 1996), LNCS, Num. 1145, pages 270–284, Springer-Verlag, September 1996.

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7. M. 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.

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2. J. Navas, M. Méndez-Lojo, M. Hermenegildo. *User-Definable Resource Usage Bounds Analysis for Java Bytecode.* Proceedings of the Workshop on Bytecode Semantics, Verification, Analysis and Transformation (BYTECODE'09), Electronic Notes in Theoretical Computer Science, 17 pages, Elsevier - North Holland, March 2009.

3. P. Chico de Guzmán, M. Carro, M. 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.

4. M. Méndez-Lojo, O. Lhoták, M. Hermenegildo. *Efficient Set Sharing using ZBDDs.* 21st Int'l. WS on Languages and Compilers for Parallel Computing (LCPC'08), LNCS, Springer-Verlag, August 2008.

5. M. Marron, D. Kapur, D. Stefanovic, M. 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.

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7. J. Navas, M. Méndez-Lojo, M. Hermenegildo. *Safe Upper-bounds Inference of Energy Consumption for Java Bytecode Applications.* The Sixth NASA Langley Formal Methods Workshop (LFM 08), April 2008. Extended Abstract.

8. P. Chico de Guzmán, M. Carro, M. 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.

9. A. Casas, M. Carro, M. 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.

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11. A. Casas, M. Carro, M. 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.

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15. E. Mera, P. López-García, G. Puebla, M. Carro, M. 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.

16. J. Navas, F. Bueno, M. 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.

17. A. Casas, D. Cabeza, M. 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.

18. G. Puebla, E. Albert, M. 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.

19. E. Albert, G. Puebla, M. 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.

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