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Authors

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

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Abstract

This document provides a unified list of publications by the CLIP group members, *classified by year* (as well as by type of publication – journal, book, invited, workshop, etc.). A list of publications classified by research topic 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 año de publicación* (así como por tipo de publicación – revista, libro, invitado, workshop, etc.). También se dispone de una lista de publicaciones clasificada por temas de investigación. 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.

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1 CLIP Group's Publications in **2023**

Articles in Refereed Conferences:

1. 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.

2. 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.

Books and Monographs:

1. M.V. Hermenegildo, J.F. Morales. *Static Analysis – 30th. International Symposium.* LNCS, Num. 14284, 566 pages, Springer, October 2023.

2. David S. Warren, Veronica Dahl, Thomas Eiter, Manuel 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.

Invited Papers and Tutorials:

1. M.V. Hermenegildo, I. Garcia-Contreras, J.F. Morales, P. Lopez-Garcia, L. Rustenholtz, D. Ferreiro, D. Jurjo. *On-the-fly Verification via (Incremental, Interactive) Abstract Interpretation with CiaoPP and Verifly.* October 2023. Invited talk at LOPSTR'23 (w/SPLASH'23).

2. 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. 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. Ferreiro, 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.

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`.

Technical Reports and Manuals:

1. 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.

2. F. Bueno, M. Carro, M. V. Hermenegildo, P. Lopez-Garcia, J.F. Morales (Eds.). *The Ciao System. Reference Manual (V1.22).* April 2023. Available at `http://ciao-lang.org`.

2 CLIP Group's Publications in **2022**

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. Yuliya Lierler, José F. Morales. *Introduction to the 38th International Conference on Logic Programming Special Issue.* Theory Pract. Log. Program., Vol. 22, Num. 4, pages 499–504, 2022.

4. Yuliya Lierler, José F. Morales. *Introduction to the 38th International Conference on Logic Programming Special Issue II.* Theory Pract. Log. Program., Vol. 22, Num. 5, pages 640–640, 2022.

5. 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.

6. Arias, Joaquín, Carro, Manuel, Chen, Zhuo, Gupta, Gopal. *Modeling and Reasoning in Event Calculus using Goal-Directed Constraint Answer Set Programming.* Theory and Practice of Logic Programming, Vol. 22, Num. 1, pages 51–80, Cambridge University Press, 2022.

Articles in Refereed Conferences:

1. Yuliya Lierler, José F. Morales, Carmine Dodaro, Verónica Dahl, Martin Gebser, Tuncay Tekle. *Proceedings 38th International Conference on Logic Programming.* Vol. abs/2208.02685, 2022.

2. Joaquín Arias, Manuel Carro, Gopal Gupta. *Towards Dynamic Consistency Checking in Goal-Directed Predicate Answer Set Programming.* 24th International Symposium on Practical Aspects of Declarative Languages, PADL 2022, LNCS, Vol. 13165, pages 117–134, Springer, 2022.

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.

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.

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.* ICLP'22 Workshop on Goal-directed Execution of Answer Set Programs, August 2022.

Technical Reports and Manuals:

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

2. L. Rustenholz. *Automated Approximate Recurrence Solving applied to Static Analysis of Energy Consumption.* CLIP Lab, IMDEA Software Institute, August 2022. Internship report. Supervised by M.V. Hermenegildo, P. Lopez-Garcia, and J. F. Morales..

3. F. Bueno, M. Carro, M. V. Hermenegildo, P. Lopez-Garcia, J.F. Morales (Eds.). *The Ciao System. Reference Manual (V1.21).* February 2022. Available at `http://ciao-lang.org`.

3 CLIP Group's Publications in **2021**

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. FirstView, pages 1–69, Cambridge U. Press, November 2021.

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. Special Issue on ICLP'21.

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.

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.

Books and Monographs:

1. 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.

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. 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.

5. 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.

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. 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.

3. 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).

4. 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.

5. Jan Wielemaker, Joaquín Arias, Gopal Gupta. *s(CASP) for SWI-Prolog.* Proceedings of the 37th ICLP 2021 Workshops, Vol. 2970, CEUR-WS.org, 2021.

6. Brendan Hall, Sarat Chandra Varanasi, Jan Fiedor, Joaquín Arias, Kinjal Basu, Fang Li, Devesh Bhatt, Kevin Driscoll, Elmer Salazar, Gopal Gupta. *Knowledge-Assisted Reasoning of Model-Augmented System Requirements with Event Calculus and Goal-Directed Answer Set Programming.* Proc. 8th Workshop on Horn Clause Verification and Synthesis, Vol. 344, pages 79–90, 2021.

7. Brendan Hall, Sarat Chandra Varanasi, Jan Fiedor, Joaquín Arias, Kinjal Basu, Fang Li, Devesh Bhatt, Kevin Driscoll, Elmer Salazar, Gopal Gupta. *Knowledge-Assisted Reasoning of Model-Augmented System Requirements with Event Calculus and Goal-Directed Answer Set Programming.* Proc. 8th Workshop on Horn Clause Verification and Synthesis, Vol. 344, pages 79–90, 2021.

Technical Reports and Manuals:

1. Joaquín Arias, Manuel Carro, Zhuo Chen, Gopal Gupta. *Modeling and Reasoning in Event Calculus using Goal-Directed Constraint Answer Set Programming.* Num. 2106.14566 [cs.AI], arXiv, June 2021.

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.* Num. CLIP-1/2021.0, 21 pages, The CLIP Lab, IMDEA Software Institute and T.U. Madrid, May 2021.

3. F. Bueno, M. Carro, M. V. Hermenegildo, P. Lopez-Garcia, J.F. Morales (Eds.). *The Ciao System. Reference Manual (V1.20).* April 2021. Available at `http://ciao-lang.org`.

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

4 CLIP Group's Publications in 2020

Articles in Refereed Conferences:

1. 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, Springer-Verlag, April 2020.

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. 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.

Books and Monographs:

1. 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.

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. 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. 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.

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), 2020. Co-located with ETAPS 2020.

Publications in Refereed Workshops:

1. 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.

2. Joaquín Arias, Manuel Carro, Zhuo Chen, Gopal Gupta. *Justifications for Goal-Directed Constraint Answer Set Programming.* Proceedings 36th International Conference on Logic Programming (Technical Communications), EPTCS, Vol. 325, pages 59–72, Open Publishing Association, 2020.

Technical Reports and Manuals:

1. Joaquín Arias, Manuel Carro. *A Theoretical Study of (Full) Tabled Constraint Logic Programming.* Num. 2009.14430 [cs.LO], arXiv, September 2020.

2. F. Bueno, M. Carro, M. V. Hermenegildo, P. Lopez-Garcia, J.F. Morales (Eds.). *The Ciao System. Ref. Manual (V1.19).* March 2020. Available at `http://ciao-lang.org`.

5 CLIP Group's Publications in **2019**

Articles in Refereed Journals:

1. 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.

2. 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.

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 (JMVLSC), SOCO'15 Special Issue, Vol. 32, Num. 3-4, pages 313–341, Old City Publishing, 2019.

Articles in Refereed Conferences:

1. 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.

2. 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.

Invited Papers and Tutorials:

1. 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.

Publications in Refereed Workshops:

1. 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.

2. 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.

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.* Pre-proceedings of the 29th International Symposium on Logic-based Program Synthesis and Transformation (LOPSTR'19), November 2019.

4. 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).

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. 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.

7. 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).

8. 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).

9. 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.

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. 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.

6 CLIP Group's Publications in 2018

Articles in Refereed Journals:

1. 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.

2. 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.

3. 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.

Articles in Refereed Conferences:

1. 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.

2. 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.

3. 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.

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1. 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.

2. Casso, Ignacio. *Towards Computing Distances Among Abstract Interpretations.* Ms. Thesis, Universidad Complutense de Madrid, 60 pages, June 2018. BSc Thesis.

3. Nataliia Stulova. *Improving Run-time Checking in Dynamic Programming Languages.* Ph.D. Thesis, Escuela Técnica Superior de Ingenieros Informáticos, UPM, May 2018.

Invited Papers and Tutorials:

1. 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.

2. 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.

3. Floriana Esposito, Carlo Ghezzi, Manuel V. Hermenegildo, Helene Kirchner, Luke Ong. *Informatics Research Evaluation.* 12 pages, Informatics Europe, March 2018. http://www.informatics-europe.org/news/436-research_evaluation.html.

Publications in Refereed Workshops:

1. 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.

2. 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.

3. 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).

4. 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).

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1. 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.

2. 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.

7 CLIP Group's Publications in **2017**

Articles in Refereed Journals:

1. 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.

Articles in Refereed Conferences:

1. Andreas Metzger, Philipp Leitner, Dragan Ivanovic, Eric Schmieders, Rod Franklin, Manuel Carro, Schahram Dustdar, Klaus Pohl. *Vergleich und Kombination von Techniken des Predictive Business Process Monitoring.* Software Engineering 2017, Fachtagung des GI-Fachbereichs Softwaretechnik, Lecture Notes in Informatics (LNI), Vol. P-267, pages 79–80, GI, February 2017.

Books and Monographs:

1. 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.

Invited Papers and Tutorials:

1. M. V. Hermenegildo, P. Lopez-Garcia, U. Liqat, M. Klemen. *Energy Consumption Analysis and Verification by Transformantion 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).

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. Salvador Tamarit, Guillermo Vigueras, Manuel Carro, Julio Mariño. *Machine Learning-Driven Automatic Program Transformation to Increase Performance in Heterogeneous Architectures.* Tools for High Performance Computing 2016, Springer International Publishing, 2017.

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1. 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.

2. Salvador Tamarit, Julio Mariño, Guillermo Vigueras, 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.

3. Guillermo Vigueras, 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.

4. 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.

5. 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).

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1. F. Bueno, M. Carro, M. V. Hermenegildo, P. Lopez-Garcia, J.F. Morales (Eds.). *The Ciao System. Ref. Manual (V1.16).* July 2017. Available at `http://ciao-lang.org`.

2. 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].

8 CLIP Group's Publications in **2016**

Articles in Refereed Journals:

1. K. Eder, J.P. Gallagher, P. Lopez-Garcia, H. Muller, Z. Banković, K. Georgiou, R. Haemmerlé, M. V. Hermenegildo, B. Kafle, S. Kerrison, M. Kirkeby, M. Klemen, X. Li, U. Liqat, J. Morse, M. Rhiger, M. Rosendahl. *ENTRA: Whole-Systems Energy Transparency.* Microprocessors and Microsystems, Vol. 47, Part B, pages 278–286, Elsevier, November 2016.

2. Manuel Carro, Andy King. *Introduction to the 32nd International Conference on Logic Programming Special Issue.* Theory and Practice of Logic Programming, Vol. 16, Num. 5-6, pages 509–514, Cambridge University Press, September 2016.

3. 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.

4. 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.

5. 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.

Articles in Refereed Conferences:

1. Joaquín Arias, Manuel Carro. *Description and Evaluation of a Generic Design to Integrate CLP and Tabled Execution.* 18th Int'l. ACM Symposium on Principles and Practice of Declarative Programming, pages 10–23, ACM Press, September 2016.

2. 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.

3. R. Haemmerlé, P. Lopez-Garcia, U. Liqat, M. Klemen, J. P. Gallagher, M. V. Hermenegildo. *A Transformational Approach to Parametric Accumulated-cost Static Profiling.* 13th International Symposium on Functional and Logic Programming (FLOPS 2016), LNCS, Vol. 9613, pages 163–180, Springer, March 2016.

4. B. Kafle, J. P. Gallagher, J. F. Morales. *RAHFT: A Tool for Verifying Horn Clauses Using Abstract Interpretation and Finite Tree Automata.* Computer Aided Verification - 28th International Conference, CAV 2016, Toronto, ON, Canada, July 17-23, 2016, Proceedings, Part I, pages 261–268, 2016.

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1. Manuel Carro, Andy King (Eds.). *32nd International Conference on Logic Programming.* Vol. 16, Num. 5-6, Cambridge University Press, September 2016.

2. 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.

3. Manuel Carro, Salvador Tamarit, Guillermo Vigueras, Julio Mariño (Eds.). *Proceedings of the First Workshop on Program Transformation for Programmability in Heterogeneous Architectures (PROHA 2016).* March 2016.

4. A. Zaks, M. V. Hermenegildo. *Proceedings of the 25th International Conference on Compiler Construction (CC 2016).* ACM, March 2016.

5. Manuel Carro, Andy King, Neda Saeedloei, Marina De Vos (Eds.). *Technical Communications of the 32nd International Conference on Logic Programming.* OASICS, Vol. 52, Schloss Dagstuhl - Leibniz-Zentrum fuer Informatik, 2016.

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1. 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.

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1. J. Arias. *Tabled CLP for Reasoning over Stream Data.* Technical Communications of the 32nd Int'l. Conference on Logic Programming, Vol. 52, pages 1–8, OASIcs, October 2016. Doctoral Consortium.

2. 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.

3. Guillermo Vigueras, 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.

4. Salvador Tamarit, Julio Mariño, Guillermo Vigueras, 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.

5. 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.

9 CLIP Group's Publications in **2015**

Articles in Refereed Journals:

1. 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. http://arxiv.org/abs/1507.05986.

2. 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.

3. 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. Salvador Tamarit, Guillermo Vigueras, 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.

2. 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.

3. 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.

4. 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.

5. 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.

6. 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.

Books and Monographs:

1. Joaquín Arias. *Design and implementation of a modular interface to integrate CLP and tabled execution.* Ms. Thesis, ETSI Ing. Informatica, July 2015.

2. 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.

Publications in Refereed Workshops:

1. 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.

2. Joaquín Arias, Manuel Carro. *Towards a Generic Interface to Integrate CLP and Tabled Execution (Extended Abstract).* Technical Communications of the 31st International Conference on Logic Programming, CEUR Workshop Proceedings, Vol. 1433, CEUR-WS.org, 2015. Extended Abstract.

3. 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.

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1. 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.

2. Guillermo Vigueras, 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. http://cliplab.org/papers/vigueras15-rule-based.pdf.

10 CLIP Group's Publications in 2014

Articles in Refereed Journals:

1. 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.

2. 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.

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. 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.

4. 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.

5. 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.

6. 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.

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1. R. Haemmerlé, J. Sneyers. *Proceedings of the Eleventh Workshop on Constraint Handling Rules (CHR 2014).* CoRR abs/1406.1510, 2014.

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1. K. Georgiou, U. Liqat. *Towards LLVM-Based Energy Consumption Analysis of Programs.* ICT-Energy (Nanoenergy) Letters, Num. 8, pages 16–17, July 2014.

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1. 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.

2. 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. http://sunsite.informatik.rwth-aachen.de/Publications/AIB/2014.

3. 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.

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1. R. Haemmerlé. *On the Confluence of the Analytical Semantics of CHR.* Num. CLIP2/2014.0, 12 pages, Technical University of Madrid (UPM), July 2014.

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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. M. Carro, Ángel Herranz, Julio Mariño. *A Model-Driven Approach to Teaching Concurrency.* ACM Transactions on Computer Education, Vol. 13, Num. 1, 2013.

3. 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.

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1. A. Serrano, P. Lopez-Garcia, F. Bueno, M. V. Hermenegildo. *Sized Type Analysis for Logic Programs.* Theory and Practice of Logic Programming, 29th Int'l. Conference on Logic Programming (ICLP'13) Special Issue, On-line Supplement (technical communication), Vol. 13, Num. 4-5, pages 1–14, Cambridge U. Press, August 2013.

2. 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.

3. 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.

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1. 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.

2. Dragan Ivanovic. *Analysis of Service-Oriented Computing Systems.* Ph.D. Thesis, School of Computer Science, UPM, January 2013.

3. R. Haemmerlé, J.F. Morales. *Proceedings of the 23rd Workshop on Logic-based methods in Programming Environments (WLPE 2013).* CoRR abs/1308.2055, 2013.

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1. Kerstin Eder, Steve Kerrison, John Gallagher, Pedro Lopez-Garcia. *Whole Systems Energy Transparency.* Num. 6, pages 67–68, August 2013.

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1. 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.

2. 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.

3. D. Ivanovic, P. Kaowichakorn, M. Carro. *Towards QoS Prediction Based on Composition Structure Analysis and Probabilistic Environment Models.* 5th International Workshop on Principles of Engineering Service-Oriented Systems, May 2013.

12 CLIP Group's Publications in **2012**

Articles in Refereed Journals:

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.* Theory and Practice of Logic Programming, Vol. 12, Num. 1–2, pages 219–252, Cambridge University Press, January 2012.

2. 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.

3. 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.

4. Elvira Albert, Puri Arenas, Samir Genaim, Germán Puebla, Damiano Zanardini. *Cost Analysis of Object-Oriented Bytecode Programs.* Theoretical Computer Science (Special Issue on Quantitative Aspects of Programming Languages), Vol. 413, Num. 1, pages 142–159, Elsevier, 2012.

5. E. Albert, P. Arenas, G. Puebla, M. Hermenegildo. *Certificate Size Reduction in Abstraction-Carrying Code.* Theory and Practice of Logic Programming, Vol. 12, Num. 3, pages 283–318, 2012.

Articles in Refereed Conferences:

1. 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.

2. 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.

3. 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.

4. 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.

5. 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.

6. E. Albert, J. Correas, 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.

7. 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.

8. 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.

9. 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.

10. 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.

11. 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.

12. 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.

Books and Monographs:

1. 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.

Invited Papers and Tutorials:

1. 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: `http://cliplab.org/papers/dagstuhl-tplpmove-slides.pdf`.

2. 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).

3. 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.

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. P. Lopez-Garcia, L. Darmawan, F. Bueno, M. V. Hermenegildo. *Interval-Based Resource Usage Verification: Formalization and Prototype.* Foundational and Practical Aspects of Resource Analysis. Second International Workshop FOPARA 2011, Revised Selected Papers, Lecture Notes in Computer Science, Vol. 7177, pages 54–71, Springer-Verlag, 2012.

Publications in Refereed Workshops:

1. R. Haemmerlé. *Coinductive Proofs over Streams as CHR Confluence Proofs.* 9th Int'l. Workshop on Constraint Handling Rules (CHR 2012), September 2012.

2. 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.

3. 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.

4. 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.

5. 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.

6. 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.

7. E. Albert, S. Genaim, G. Román-Díez. *Conditional Termination of Loops over Arrays.* ETAPS Workshop on Bytecode Semantics, Verification, Analysis and Transformation (BYTECODE'12), March 2012.

8. 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.

9. 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.

10. 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.

13 CLIP Group's Publications in 2011

Articles in Refereed Journals:

1. 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.

2. 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.

3. 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.

4. 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.

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. 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.

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1. 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.

2. 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.

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. 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.

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. 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 Interational Symposium on Formal Methods (FM 2011), Lecture Notes in Computer Science, Vol. 6664, pages 353–368, Springer, June 2011.

8. 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.

9. 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.

10. 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.

11. 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.

12. 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.

13. D. Ramírez-Deantes, J. Correas, 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.

14. 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.

15. M. Carro, D. Karastoyanova, G. A. Lewis, A. Liu. *Third International Workshop on Principles of Engineering Service-Oriented Systems (PESOS 2011).* ICSE, pages 1218–1219, 2011.

16. 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.

17. Alejandro Sánchez, César Sánchez. *A Theory of Skiplists with Applications to the Verification of Concurrent Datatypes.* Proc. of the 3rd NASA Formal Methods Symposium (NFM'11), LNCS, Vol. 6447, pages 343–358, Springer, 2011.

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1. M. Carro, D. Karastoyanova, G. A. Lewis, A. Liu. *Third International Workshop on Principles of Enginering Service-Oriented Systems (PESOS 2011).* ACM, May 2011.

2. M. Carro, J.H. Reppy. *ACM SIGPLAN Proceedings of the Workshop on Declarative Aspects of Multicore Programming.* ACM, January 2011.

3. Diana Ramírez-Deantes. *Modular and field-sensitive termination analysis of java bytecode.* Ph.D. Thesis, Universidad Politécnica de Madrid (UPM), Facultad Informática UPM, 28660-Boadilla del Monte, Madrid-Spain, 2011.

Invited Papers and Tutorials:

1. M. V. Hermenegildo, F. Bueno, M. Carro, P. Lopez-Garcia, R. Haemmerlé, E. Mera, J. F. Morales, G. Puebla. *An Overview of the Ciao System.* Proc. of RuleML-Europe 2011, LNCS, Vol. 6826, pages 2–3, Springer-Verlag, July 2011. (abstract of invited talk).

Articles in Books and Other Collections:

1. M. Carro, M. V. Hermenegildo. *Logic Languages.* Encyclopedia of Parallel Computing, pages 1057–1068, Springer, 2011.

Publications in Refereed Workshops:

1. 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.

2. E. Albert, R. Bubel, S. Genaim, R. Hähnle, G. Román-Díez. *Verified Resource Guarantees for Heap Manipulating Programs.* 10th KeY Symposium, August 2011.

3. 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.

4. Diego Alonso, Puri Arenas, Samir Genaim. *Handling Non-linear Operations in the Value Aanalysis 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.

5. 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.

Technical Reports and Manuals:

1. F. Bueno, M. Carro, M. V. Hermenegildo, R. Haemmerlé, P. Lopez-Garcia, E. Mera, J.F. Morales, G. Puebla (Eds.). *The Ciao System. Ref. Manual (V1.14).* July 2011. Available at `http://ciao-lang.org`.

2. M. V. Hermenegildo, J.F. Morales. *The LPdoc Documentation Generator. Ref. Manual (V3.0).* UPM, July 2011. Available at `http://ciao-lang.org`.

3. R. Haemmerlé. *Toward Observational Equivalences for Linear Logic Concurrent Constraint Languages.* Num. CLIP5/2011.0, 32 pages, Technical University of Madrid (UPM), May 2011.

4. 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 `http://cliplab.org/papers/resource-verif-11-tr.pdf`.

5. 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.

6. 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.

7. 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.

14 CLIP Group's Publications in 2010

Articles in Refereed Journals:

1. 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.

2. 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.

3. 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.

4. Nicolas Fay, Simon Garrod, Leo Roberts, Nik Swoboda. *The Interactive Evolution of Human Communication Systems.* Cognitive Science, Vol. 34, pages 351–386, 2010.

5. 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.

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.

Articles in Refereed Conferences:

1. 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.

2. E. Albert, P. Arenas, S. Genaim, G. Puebla, D. Ramírez. *From Object Fields to Local Variables: a Practical Approach to Field-Sensitive Analysis.* Static Analysis Symposium (SAS'10), LNCS, pages 100–116, Springer, September 2010.

3. 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.

4. 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.

5. 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.

6. 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.

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, 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.

9. 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.

10. 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.

11. 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.

12. Martin Leucker, César Sánchez. *Regular Linear-Time Temporal Logic.* Proceedings of the 17th International Symposium on Temporal Representation and Reasoning (TIME'10), pages 3–5, IEEE Computer Society, 2010.

13. 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.

14. 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.

Books and Monographs:

1. 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.

2. 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.

3. 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.

4. 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.

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. M. V. Hermenegildo, J. Palsberg. *Proceedings of the 37th ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages (POPL 2010).* ACM, January 2010.

7. M. Carro, R. Peña-Marí. *Practical Aspects of Declarative Languages – 12th. International Symposium, PADL 2010.* LNCS, Vol. 5937, Springer-Verlag, January 2010.

8. G. Barthe, M. V. Hermenegildo. *Verification, Model Checking, and Abstract Interpretation, 11th International Conference, VMCAI 2010.* LNCS, Vol. 5944, Springer, January 2010.

Invited Papers and Tutorials:

1. 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.

2. 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.

3. Elvira Albert. *From Termination to Cost (in Object-Oriented Languages).* Workshop on Termination (WST'10), 1 pages, July 2010.

Articles in Books and Other Collections:

1. A. Metzger, S. Benbernou, M. Carro, M. Driss, G. Kecskemeti, R. Kazhamiakin, K. Krytikos, A. Mocci, 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.

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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.

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6. 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 `http://cliplab.org/papers/resource-veri`

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1. 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.

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4. 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.

5. 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.

6. 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.

7. 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.

8. 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.

9. 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.

10. 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.

11. 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.

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1. M. Carro, José F. Morales. *Proceedings of CICLOPS 2004.* Num. CLIP11/2004.0, 75 pages, Fundación General de la Universidad Politécnica de Madrid, Technical University of Madrid, September 2004.

2. Susana Muñoz, José M. Gómez, Petra Hofstedt. *Proceedings of WLPE 2004.* 131 pages, INSA Rennes, September 2004.

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.

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1. 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.

2. 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 `http://www.ati.es/novatica/`.

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1. 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.

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1. 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.

2. 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.

3. 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.

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1. F. Bueno. *Sharing Stars.* Num. CLIP17/2004.0, 44 pages, Technical University of Madrid, December 2004.

2. M. DeMarco, J. Lipton. *Uniform Algebras.* Num. CLIP16/2004.0, 20 pages, Technical University of Madrid, October 2004.

3. E. Mera. *Estimación de los coeficientes del análisis de complejidad mediante técnicas estadísticas.* Num. CLIP14/2004.0, Technical University of Madrid, September 2004.

4. E. Mera. *Development of a Prolog Profiler.* Num. CLIP13/2004.1, Technical University of Madrid, September 2004.

5. E. Mera. *Desarrollo de un Profiler para Prolog.* Num. CLIP13/2004.0, Technical University of Madrid, September 2004.

6. 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.

7. 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 `http://ciao-lang.org`.

8. 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.

9. 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.

10. 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.

11. 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.

12. 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.

13. 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.

14. 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. `http://cliplab.org/papers/persdb-tr1.pdf`.

15. 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.

16. Pattengale, N. D.. *Transactional Semantics.* Num. CLIP3/04.0, 24 pages, Technical University of Madrid (UPM), February 2004.

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18. F. Bueno. *CiaoPP Internals.* Num. CLIP2/04, 66 pages, Technical University of Madrid (UPM), January 2004.

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1. 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.

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2. 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.

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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. M. Carro, J. Correas. *Proceedings of the ITCLS 2003 CoLogNet Workshop.* Num. CLIP4/2003.0, 64 pages, Fundación General de la Universidad Politécnica de Madrid, Technical University of Madrid, September 2003.

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1. M. Carro, O. Martínez. *¿Dónde está mi interrupción?.* Novática, Num. 165-166, 8 pages, Asociación de Técnicos en Informática, September 2003. Available at `http://www.ati.es/novatica/`.

2. 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.

3. 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.

4. 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.

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1. 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.

2. 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.

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1. 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.

2. 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.

3. 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.

4. J.M. Gomez. *A High Level Model and Implementation of Labeling in Distributed (C)LP Systems.* Num. CLIP5/2003.0, Technical University of Madrid, September 2003. `http://cliplab.org/papers/ordcl`

5. 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.

6. 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. `http://cliplab.org/papers/persdb-tr.pdf`.

7. F. Bueno, D. Cámara, C. Vaucheret. *Analysis and specialization of programs with meta-calls.* Num. CLIP9/2003.0, Technical University of Madrid, June 2003.

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. David Trallero Mena. *Local and Global Multiattributed Variables.* Num. CLIP10/03.0, Facultad de Informática, UPM, Technical University of Madrid (UPM), 2003.

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1. 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.

2. 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.

3. 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.

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1. M. Leuschel, F. Bueno. *Preproceedings of the International Workshop on Logic Based Program Development and Transformation.* 304 pages, Facultad de Informatica, September 2002.

2. 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.

3. 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.

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

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1. 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 `http://www.ati.es/novatica/`.

2. 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 `http://www.ati.es/novatica/`.

3. M. V. Hermenegildo, F. Bueno, G. Puebla, P. Lopez-Garcia. *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.

4. 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 `http://www.ati.es/novatica/`.

5. 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 `http://www.ati.es/novatica/`.

6. 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).

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1. 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`.

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1. 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.

2. 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.

3. 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.

4. M. Carro, C. Vaucheret, K.-K. Lau. *Proceedings of the CBD 2002 / ITCLS 2002 CoLogNet Joint Workshop.* Num. CLIP4/2002.0, Technical University of Madrid, September 2002.

5. M. Carro, M. Hermenegildo. *A Simple Approach to Distributed Objects in Prolog.* Colloquium on Implementation of Constraint and LOgic Programming Systems (ICLP associated workshop), July 2002.

6. C. Vaucheret, F. Bueno. *More Precise Yet Efficient Type Inference for Logic Programs.* Workshop on Logic Programming Environments, July 2002.

7. 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.

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1. 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.

2. 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.

3. 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 `http://ciao-lang.org`.

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2. 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.

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1. S. Muñoz, J.J. Moreno-Navarro, M. V. 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.

2. 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.

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1. 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.

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.

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1. 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.

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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 `http://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.

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2. 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.

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1. F. Bueno, J. Correas. *Active Module Service.* Num. CLIP4/2001.1, Facultad de Informática, UPM, Technical University of Madrid (UPM), 2001.

2. M. Carro, M. Hermenegildo. *Remote Execution and Mobile Objects in Ciao Prolog.* Num. CLIP3/2001.1, Facultad de Informática, UPM, Technical University of Madrid (UPM), 2001.

3. F. Bueno, M. Hermenegildo, G. Puebla, P. J. Stuckey. *Safety for Logic Programs.* Num. CLIP1/2001.1, Facultad de Informática, UPM, Technical University of Madrid (UPM), 2001.

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1. 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.

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. 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.

4. 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.

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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. 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.

3. 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.

4. 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.

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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. 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.

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1. 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.

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2. 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.

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1. 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.

2. 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.

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1. 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.

2. M. 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.

3. 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.

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5. 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.

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2. M. Hermenegildo, D. Swierstra. *Programming Languages: Implementations, Logics, and Programs – Proc. of the 1995 Conference.* LNCS, Num. 982, 466 pages, Springer-Verlag, September 1995.

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1. M. 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 `http://www.cliplab.org/`.

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

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 http://www.cliplab.org/.

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6. 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.

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1. 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.

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

9. F. Bueno. *The CIAO Multiparadigm Compiler: A User's Manual.* Num. CLIP8/95.0, Facultad de Informática, UPM, June 1995.

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7. 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.

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