

# CURRICULUM VITAE

GIORGIO DELZANNO

**Place and date of birth:** Genova, December 6, 1968

**Citizenship:** Italian

## **Address:**

D.I.S.I. - Dipartimento di Informatica e Scienze dell'Informazione  
via Dodecaneso 35, 16146 Università di Genova 16146 Genova Italy  
Tel: 0039-010-3536638, Fax: 0039-010-3536699  
e-mail: giorgio@disi.unige.it

## **Research interests**

Specification, Analysis and Verification of Concurrent Systems  
- Parameterized and Infinite-state Verification  
- Tools for the Analysis of Petri Nets  
- Constraint-based Verification  
- Verification of Security, Consistency, and Communication Protocols  
Linear Logic and Logic Programming  
Higher-Order and Intuitionistic Logic Programming

## **Education**

Diploma in Computer Science, University of Genova, Italy, June 92  
PhD in Computer Science, University of Pisa, Italy  
Advisor: Prof. Maurizio Martelli  
Title of the Dissertation: *Logic and Object-oriented Programming in Linear Logic*,  
March 1997  
Researcher (Assistant Professor) in Computer Science, April 2000  
Habilitation for Associate Professor, July 2002.

## **Current Position**

Since December 2005, Associate Professor at the Dipartimento di Informatica e Scienze dell'Informazione, Università di Genova, Italy.  
Research and teaching duties (two courses for semester).

## **Previous Academic Employment**

Postdoctoral Scientist in Computer Science, Max-Planck-Institut fuer Informatik Saarbruecken, Germany, October 97-October 99.  
Research Associate, Dipartimento di Informatica e Scienze dell'Informazione, Università di Genova, Italy, October 99-April 2000.

## **Visiting Positions**

Visiting Fellow at UPENN Philadelphia, USA, Prof. D. Miller, March-May 1995.  
Visiting Fellow at Loria Nancy, France, Prof. D. Galmiche, October-December 1996.  
Visiting Researcher at University of Munich, Germany, Pr. J. Esparza, one week in June 1999.  
Visiting Researcher at LSV-ENS Cachan, Paris, Dr. L. Fribourg, one week in July 1999.  
Visiting Researcher at Université Libre de Bruxelles, Belgium, Prof. J.-F. Raskin, one week in Sept.

1999.

Visiting Researcher at UPENN Philadelphia, USA, Prof. R. Alur and Dr. S. La Torre, two weeks in July 2000.

Visiting Researcher at Bell Labs, Murray Hill, USA, Dr. K. Namjoshi, two weeks, August 2000.

Visiting Researcher at Microsoft Research, Redmond, USA, Prof. J. Larus and Dr. S. Rajamani, three weeks between August and September 2000.

Visiting Researcher at Université Libre de Bruxelles, Belgium, Prof. J.-F. Raskin, two weeks, March 2000, and two weeks, May 2001.

Visiting Researcher at the University of Uppsala, Sweden, Prof. P. A. Abdulla, two weeks, April 2001.

Visiting Researcher at the INRIA-LORRAINE, Nancy, France, Prof. M. Rusinowitch, two weeks, May 2002.

Visiting Researcher at the CMI Università de Provence, Marseille, France, Prof. R. Amadio una settimana nel novembre 2003.

## **Projects**

CNR (94): Programmazione Logica nuove proposte linguistiche e loro integrazione (resp. Prof. Martelli);

MURST (ex-60%) (93-94): Fondamenti e metodi per lo sviluppo di software affidabile (resp. Prof. Costa);

MURST (ex-40%) (94-95-96): Modelli della computazione e dei Linguaggi di Programmazione (resp. Prof. Andrea Maggiolo);

CNR(95): Linguaggi di coordinazione (resp. Prof. Catuscia Palamidessi);

CNR (95-96): S.T.E. Strumenti per analisi, trasformazione di programmi, tecniche di ingegneria del software, estensioni con vincoli, concorrenza ed oggetti (coord. Prof. Martelli);

CNR (96): Progetto strategico: Applicazioni della Matematica per la tecnologia e la società - sotto-progetto calcolo simbolico (resp. Prof. Martelli);

CNR (96): Formalismi per la specifica e la descrizione di sistemi ad oggetti (resp. Prof. Egidio Astesiano).

S.T.E. 96-99: Strumenti per analisi e trasformazione di programmi, Tecniche di ingegneria del software, Estensione con vincoli, concorrenza ed oggetti.

National project founded by CNR (National Research Council).

MURST 2001: Tecniche di Analisi e Verifica per Protocolli Utilizzati in Sistemi Concorrenti e Distribuiti

Individual project founded by the Italian Minister for Education, University and Research, 2001.

(Finanziamenti a progetti di singoli e/o giovani ricercatori - DR n 226 del 25.10.2000, Università di Genova, Area 01, Scienze matematiche)

MSR 2001: Financial support from Microsoft Research, Redmond, Seattle, USA, for research on constraint-based verification, 2001.

ULB 2001: Financial support from Université Libre de Bruxelles for research collaboration on infinite-state model checking, 2001.

MURST 2002: Verifica di Protocolli di Sicurezza in Ambienti Multi-client

Individual project founded by the Italian Minister for Education, University and Research, 2002.

(Finanziamenti a progetti di singoli e/o giovani ricercatori - DR n 226 del 25.10.2000, Università di Genova, Area 01, Scienze matematiche)

PRIN 2002-2004: COVER Verifica di Sistemi Reattivi basata su Vincoli

National project founded by the Italian Minister for Education, University and Research, 2002-2004. Area 01, Scienze matematiche)

PRIN 2003-2005: Progetto nazionale cofinanziato dal MIUR: Sintesi di procedure di decisione basate sulla deduzione con applicazioni all'analisi formale e automatica di programmi. Area 09 Ingegneria industriale e dell'informazione

PRIN 2006-2008: Progetto nazionale cofinanziato dal MIUR: Vincoli e preferenze come formalismo unificante per l'analisi di sistemi informatici e la soluzione di problemi reali. Area 01, Scienze matematiche, Coordinatore unità di Genova

### **Awards**

Best paper award "Model Checking in CLP" at ETAPS 1999

Best student paper award "Regular model checking without transducers at TACAS 2007

Best paper award "On the Qualitative Analysis of Conformon P-systems" at WMC 2008

### **Professional Activities**

#### *PC chair:*

SAVE 2001, ICLP 2001 workshop on Specification, Analysis and Validation for Emerging Technologies in Computational Logic.

SAVE 2002, second edition of SAVE, FLOC 2002.

#### *Organizing committee:*

ICLP 1994, Int'l Conference on Logic Programming, Santa Margherita Ligure, Genova.

ETAPS 2001, European Joint Conferences on Theory and Practice of Software, Genova.

#### *Program committee:*

DYNAMICS 1998, a JICSLP 98 workshop.

AGP 2000, Joint Conference on Declarative Programming, APPIA-GULP-PRODE.

FRODOS 2002, 4th Int'l Workshop on Frontiers of Combining Systems.

SAVE 2001 and 2002.

INFINITY 2002, a CONCUR 2002 Satellite Workshop.

AGP 2002, Joint Conference on Declarative Programming, APPIA-GULP-PRODE.

Time for the Web 2003 Workshop, In conjunction with SEKE2003 Fifteenth International Conference on Software Engineering and Knowledge Engineering

TACAS 2004, Tenth International Conference on TOOLS AND ALGORITHMS FOR THE CONSTRUCTION AND ANALYSIS OF SYSTEMS, European Joint Conferences on Theory and Practice of Software (ETAPS 2004)

CP+CV 2004 Workshop on Constraint Programming and Constraint for Verification (CP+CV'04) at the European Joint Conferences on Theory and Practice of Software (ETAPS)

SVV 03: International Workshop on Software Verification and Validation in conjunction with ICLP 2003

CDB 2004: Symposium on Applications of Constraint Databases in conjunction with SIGMOD-PODS 2004

WISP 2004: Workshop on Issues in Security and Petri nets

LOPSTR 2004: International Symposium on Logic-based Program Synthesis and Transformation 2004

ICLP 2005, 2006: International Conference on Logic Programming

PADTAD 2003, 2004. 2005: Parallel and Distributed Systems: Testing and Debugging

FInCo 2005, 2006, 2007: Workshop on the Foundations of Interactive Computation

MTCoord 2006, 2007: International Workshop on Methods and Tools for Coordinating Concurrent, Distributed and Mobile Systems

PPDP 2007: 9th International ACM SIGPLAN Symposium on Principles and Practice of Declarative Programming

*Invited talks:*

VCL 2001, the Second International Workshop on Verification and Computational Logic, held at the PLI 2001 Symposium, September 2001.

*A Possible Use of Constraint Programming Technology in Formal Methods: Automatic Verification of Concurrent Systems with Unbounded Local Data*, CFV 2002 held in conjunction with CP 2002, Ithaca, September 2002.

*Automatic Verification of Multithreaded and Mobile Programs via Infinite-State Symbolic Model Checking*, Invite talk Meeting on Vérification des propriétés quantitatives, Grenoble, March 2003.

**Teaching (Description in Italian)**

**2000-01 Titolare** Teoria ed Applicazione delle Macchine Calcolatrici per il III anno del Corso di Laurea in Scienze Ambientali e Marine, Università di Genova, 60 ore. Contenuti: Fondamenti di informatica, reti (Internet, Web), word processing (Word), fogli elettronici (Excel), database (Access).

**2000-01 Assistente** Intelligenza Artificiale II per il V anno del corso di Laurea in Informatica, Università di Genova (Titolare: Prof. Maurizio Martelli), 5 ore. Contenuti: Modal Logic, Higher-order intuitionistic logic programming.

**2000-01 Assistente di laboratorio** Reti di Calcolatori per il III anno del Corso di Laurea in Informatica ed il II anno di Diploma in Informatica, Università di Genova, (titolare: Prof.ssa Gianna Reggio), 20 ore. Contenuti: Dynamic HTML, Java (Applets, Servlets, Sockets), Javascript, e CGI.

**2001-02 Titolare** Informatica Generale 1 per il I anno del Corso di Laurea Statistica Matematica e Trattamento Informatico dei Dati (SMID), Università di Genova, 60 ore. Contenuti: Fondamenti di informatica, reti (Internet, Web), word processing (Word), fogli elettronici (Excel), database (Access).

**2001-02 Co-titolare** Intelligenza Artificiale II per il Corso di Laurea in Informatica, Università di Genova), 60 ore. Contenuti: Modal Logic, Temporal Logics (LTL and CTL), Model Checking Algorithms (Tableau), Symbolic Model Checking, Applications of Model Checking to Planning, Beliefs and Knowledge and Automated Verification

**2002-03 Titolare** Informatica Generale 1 per il I anno del Corso di Laurea Statistica Matematica e Trattamento Informatico dei Dati (SMID), Università di Genova, 60 ore. Contenuti: Fondamenti di informatica, reti (Internet, Web), word processing (Word), fogli elettronici (Excel), database (Access).

**2002-03 Titolare** Laboratorio di Informatica II anno di Scienze Geologiche Università di Genova, 40 ore. Contenuti: Fondamenti di informatica, reti (Internet, Web), word processing (Word), fogli elettronici (Excel), database (Access).

**2002-03 Co-titolare** Intelligenza Artificiale II per il Corso di Laurea in Informatica, Università di Genova), *svolto solo parzialmente per mancanza di studenti*

**2003-08 Titolare** Sistemi operativi I per il Corso di Laurea in Informatica, Università di Genova, 90 ore. Contenuti: Introduzione ai sistemi operativi, gestione processi e memoria, file system

**2003-08 Co-titolare** Intelligenza Artificiale II per il Corso di Laurea in Informatica, Università di Genova) (II semestre).

**SELECTED PUBLICATIONS**

## International Journals

- [1] G. Delzanno, D. Galmiche, and M. Martelli. A Specification Logic for Concurrent Object-Oriented Programming. *Mathematical Structures in Computer Science*, 9(3): 253-286, Cambridge University Press, 1999.
- [2] M. Bugliesi, G. Delzanno, L. Liquori, and M. Martelli. Object Calculi in Linear Logic. *Journal of Logic and Computation*, vol. 10(1), 2000.
- [3] G. Delzanno and M. Martelli. Proofs as Computations in Linear Logic. *Theoretical Computer Science*, 258(1-2):269–297, Elsevier, 2001.
- [4] G. Delzanno and A. Podelski. Constraint-based Deductive Model Checking. *Software Tools for Technology Transfer*, 3(3): 250-270, Elsevier, 2001.
- [5] M. Bozzano, G. Delzanno and M. Martelli. An Effective Fixpoint Semantics for Linear Logic Programs. *Theory and Practice of Logic Programming*, Vol 2(1), pages 85-122, Cambridge University Press, January 2002.
- [6] G. Delzanno. Constraint-based Verification of Parameterized Cache Coherence Protocols Formal Methods in System Design 23(3): 257-301, 2003.
- [7] G. Delzanno, J.-F. Raskin, L. Van Begin Covering Sharing Trees: Compact Data Structures for Parameterized Verification *Journal of Software and Tools for Technology Transfer* 5(2-3): 268-297, 2004
- [8] M. Bozzano, G. Delzanno and M. Martelli. Model Checking Linear Logic Specifications. *Journal of Theory and Practice of Logic Programming* 4(5-6): 573-619 (2004)
- [9] M. Bozzano, G. Delzanno. Automated Verification of Security Protocols. *Journal of Symbolic Computation* 38(5): 1375-1415 (2004).
- [10] G. Delzanno. A Symbolic Procedure for Control Reachability in the Asynchronous Pi-calculus. *Electronic Notes in Theoretical Computer Science* 98: 21-33 (2004)
- [11] G. Delzanno. Constraint-based Automatic Verification of Abstract Models of Multithreaded Programs *Journal of Theory and Practice of Logic Programming* 7 (1&2): 67-91 (2007)
- [12] G. Delzanno and R. Montagna. Reachability Analysis of Fragments of Mobile Ambients in AC Term Rewriting. *Formal Aspects of Computing* 20(4-5): 407-428 (2008)

## Electronic Journals

- [1] G. Delzanno. Specification of Term Rewriting in Linear Logic *Electronic Notes in Theoretical Computer Science*, vol. 17, Elsevier, 1998.
- [2] M. Bozzano, G. Delzanno and M. Martelli. On the relations between disjunctive and linear logic programming *Electronic Notes in Theoretical Computer Science*, vol. 48, Elsevier, 2001.
- [3] G. Delzanno. An assertional language for systems parametric in several dimensions (Preliminary results). *Electronic Notes in Theoretical Computer Science*, vol. 50, pages 373–387, 2001.
- [4] G. Delzanno. An Overview of MSR(C): A CLP-based Framework for the Symbolic Verification of Parameterized Concurrent Systems *Electronic Notes in Theoretical Computer Science*, vol. 76, 2002.
- [5] G. Delzanno. A Symbolic Procedure for Control Reachability in the Asynchronous Pi-calculus. *Electronic Notes in Theoretical Computer Science* 98: 21-33 (2004)
- [6] G. Delzanno, R. Montagna. On Reachability and Spatial Reachability in Fragments of BioAmbients. *Electronic Notes in Theoretical Computer Science*, vol 171(2): 69-79, 2007.

## Book Chapters

- [1] M. Bozzano, G. Delzanno, M. Martelli, V. Mascardi, F. Zini. Logic Programming and Multi-Agent Systems: a Synergic Combination for Applications and Semantics. In K.R. Apt, V.W. Marek, M. Truszczyński, and D.S. Warren, editors, *The Logic Programming Paradigm: a 25-Year Perspective*, pages 5-32, Series: Artificial Intelligence. Springer Verlag, 1999.
- [2] G. Delzanno, M. Martelli. Objects in a Higher Order Linear Logic Setting. In *Special-Issue in Object-Oriented Programming, Workshop Reader of the 10th European Conference on Object-Oriented Programming, ECOOP 96*, D-Punkt, 1997.

## PhD Thesis

- [1] G. Delzanno. Logic and Object-Oriented Programming in Linear Logic. PhD Thesis, Technical report TD 2/97, Università di Pisa, March 1997.

## Conferences and Workshops

- [1] G. Delzanno, M. Martelli. Insiemi di soluzioni di programmi logici. In *Atti del settimo convegno sulla programmazione logica, GULP 92*, Tremezzo, Lago di Como, pages 191-205, 17-19 giugno 1992.
- [2] G. Delzanno, M. Martelli. A Bottom-Up Characterization of Finite Succes. In *Proceedings of the 1993 International Logic Programming Symposium, ILPS 93*, page 676. The MIT Press, 1993.
- [3] G. Delzanno, M. Martelli. Objects in Forum. In *Proceedings of the 1995 International Logic Programming Symposium, ILPS 95*, pages 115–129. The MIT Press, 1995.
- [4] G. Delzanno, M. Martelli. Yahoo: an Object-oriented Logic Programming Language. In *Proceedings of the Workshop on Operational and Denotational Semantics of Logic Programs: Extending Proof- and Model-theoretic Analyses held in conjunction with the International Logic Programming Symposium, Portland, Oregon*, pages 95-105, 1995.
- [5] G. Delzanno, M. Martelli. Proofs as Computations. In *Proceedings of GULP 96, San Sebastian, Spain*, pages 115–129, 1996.
- [6] M. Bugliesi, G. Delzanno, L. Liquori, M. Martelli. A Linear Logic Calculus of Objects. In *Proceedings of the Joint International Conference and Symposium on Logic Programming, JICSLP 96*, pages 67–81, The MIT Press, 1996.
- [7] G. Delzanno, M. Martelli. Objects in a Higher Order Linear Logic Setting, In *Proceedings of the Proof Theory and Concurrent Object-Oriented Programming pre-ECOOP 96 Workshop*, Linz, Austria, luglio 1996.
- [8] M. Bozzano, G. Delzanno, M. Martelli. A Linear Logic Semantics for Object-Oriented, Deductive and Active Databases. In *Proceedings of APPIA-GULP-PRODE 97*, Grado, Giugno 1997.
- [9] M. Bozzano, G. Delzanno, M. Martelli. A Linear Logic Specification of Chimera. In *Proceedings of DYNAMICS 97 held in conjunction with the International Logic Programming Symposium ILPS 97*, Port-Jefferson, New York, USA, 17 October 1997.
- [10] P.Argòn, G.Delzanno, S.Mukhopadhyay, A.Podelski. Model Checking for Communication Protocols. In *Proceedings of the 2nd Workshop on Verification, Model Checking and Abstract Interpretation, A. Bossi, A. Cortesi, F.Levi ed.*, Rapporto di Ricerca CS98-12, Dipartimento di Matematica Applicata ed Informatica, Università di Venezia, Pisa, Settembre, 1998.
- [11] M. Bozzano, G. Delzanno, M. Martelli, V. Mascardi, F. Zini. Multi-Agent Systems Development as a Software Engineering Enterprise. In *Proceedings of First International Workshop on Practical Aspects of Declarative Languages(PADL 99) held in conjunction with POPL 99*, pages 46–60, Lecture Notes in Computer Science, vol. 1551, Springer, San Antonio, Texas, USA, January 1999.
- [12] G.Delzanno, A.Podelski. Verification of Infinite-State Systems in Constraint Logic Programming. In F. Fages, editor, *Actes des the Huitiemes Journée Francophones de Programmation Logique et programmation par Contraintes (JFPLC'99)*, pages 13-22, Hermes Science, Lyon, France, 2-4 Juin 1999.

- [13] G. Delzanno, and A. Podelski. Model Checking in CLP. In *Proceedings of the Fifth International Conference on Tools and Algorithms for the Construction and Analysis of Systems, TACAS '99, held as Part of the Joint European Conferences on Theory and Practice of Software, ETAPS '99*, pages 223-239, Lecture Notes in Computer Science, vol. 1579, Springer, 1999. The authors received the award for the best paper of ETAPS '99 assigned from the European Association for Programming Languages and Systems.
- [14] G. Delzanno, J. Esparza, and A. Podelski. Constraint-based Analysis of Broadcast Protocols. In *Proceedings of the Annual Conference of the European Association for Computer Science Logic, CSL '99*, Lecture Notes in Computer Science, vol. 1683, pag. 50-66, Springer, 1999.
- [15] G. Delzanno. Automatic Verification of Parameterized Cache Coherence Protocols. In *Proceedings of the 12th International Conference on Computer Aided Verification, CAV 2000*, Lecture Notes in Computer Science, vol. 1855, pages 53-68, Springer 2000.
- [16] G. Delzanno. Verification of Consistency Protocols via Infinite-state Symbolic Model Checking, a Case Study. In *Formal Methods for Distributed System Development, Proceedings of the IFIP TC6 WG6.1 Joint International Conference on Formal Description Techniques for Distributed Systems and Communication Protocols (FORTE XIII) and Protocol Specification, Testing, and Verification (PSTV XX)*, pages 171-188, Kluwer, 2000.
- [17] G. Delzanno, and J. F. Raskin. Symbolic Representation of Upward-closed Sets. In *Proceedings of the 6th International Conference on Tools and Algorithms for Construction and Analysis of Systems, TACAS 2000, held as Part of the European Joint Conferences on the Theory and Practice of Software, ETAPS 2000*, Lecture Notes in Computer Science, vol. 1785, pages 426-440, Springer 2000.
- [18] M. Bozzano, G. Delzanno, and M. Martelli. A Bottom-up semantics for Linear Logic Programs. In *Proceedings of the 2nd international ACM SIGPLAN conference on Principles and practice of declarative programming, PPDP 2000*, pages 92-102, ACM Press, 2000.
- [19] G. Delzanno. Specifying and debugging security protocols via hereditary harrop formulas and lambda prolog, a case study. In *Proceedings of the 5th International Symposium on Functional and Logic Programming, FLOPS 2001*, Lecture Notes in Computer Science, vol. 2024, pages 123-137, Springer 2001.
- [20] M. Bozzano, G. Delzanno and M. Martelli. An effective fixpoint semantics for first-order linear logic programs. In *Proceedings of the 5th International Symposium on Functional and Logic Programming, FLOPS 2001*, Lecture Notes in Computer Science, vol. 2024, pages 138-152, Springer 2001.
- [21] R. Carvajal-Schiaffino, G. Delzanno, and G. Chiola. Combining Structural and Enumerative Techniques for the Validation of Bounded Petri Nets. In *Proceedings of the 7th International Conference on Tools and Algorithms for the Construction and Analysis of Systems, TACAS 2001, held as Part of the Joint European Conferences on Theory and Practice of Software, ETAPS 2001*, pages 435-449, Lecture Notes in Computer Science, vol. 2031, Springer, 2001.
- [22] G. Delzanno, J.-F. Raskin, and L. Van Begin. Attacking Symbolic State Explosion. In Proc. of the 13th International Conference on Computer Aided Verification, CAV 2001, pages 298-310, Lecture Notes in Computer Science, vol. 2102, Springer, 2001.
- [23] G. Delzanno and T. Bultan. Constraint-based Verification of Client-server Protocols. In Proc. of the Seventh International Conference on Principles and Practice of Constraint Programming, CP 2001, Lecture Notes in Computer Science, vol. 2239, Springer 2001, pages 286-301, December 2001.
- [24] G. Delzanno and M. Martelli. An Embedding of Calculi for Negation as Failure into Linear Logic. Proc. of APPIA-GULP-PRODE 2001 Joint Conference on Declarative Programming, AGP 2001, September 2001.
- [25] M. Bozzano and G. Delzanno Beyond Parameterized Verification. In Proc. of TACAS 2002, pag 221-235, LNCS 2280, April 2002.
- [26] G. Delzanno, J.-F. Raskin, and L. Van Begin. Towards the Automated Verification of Multithreaded Java Programs. In Proc. of TACAS 2002, pag 173-187, LNCS 2280, April 2002.
- [27] G. Delzanno. Constraint-based Verification of Parameterized Synchronous Systems. Proc. of FroCos 2002, pag. 72-86, LNCS 2309, April 2002.

- [28] P. Argón, G. Delzanno, S. Mukhopadhyay, A. Podelski. Model Checking Communication Protocols. In Proc. of SOFSEM 2001, 28th Conference on Current Trends in Theory and Practice of Informatics, Lecture Notes in Computer Science, vol. 2234, Springer 2001, pages 160-170, 2001.
- [29] G. Delzanno, S. Etalle Combining Proof Theoretic Analysis, Transformations, and Logic Programming for Debugging Security Protocols In *Selected Papers of LOPSTR 2001*, Lecture Notes in Computer Science 2372, p. 76-90, 2001.
- [30] M. Bozzano and G. Delzanno Algorithmic Verification of Invalidation-based Protocols To appear in CAV 2002, July 2002.
- [31] M. Bozzano and G. Delzanno Automated Verification of Security Protocols In Proc. of the 4th international ACM SIGPLAN conference on Principles and practice of declarative programming PPDP 2002, p. 38-49, 2002
- [32] G. Delzanno and P. Ganty Symbolic Methods for Automatically Proving Secrecy and Authentication in Infinite-state Models of Cryptographic Protocols In Proc. of Workshop on Issues in Security and Petri Nets, WISP 2003, in conjunction with the 24th International Conference on Application and Theory of Petri Nets, 2003.
- [33] P. Ammirati, G. Delzanno Constraint-based Automatic Verification of Time Dependent Security Properties. In Proc. of SPV 2003, a Satellite workshop of Concur 03, September 2003.
- [34] G. Delzanno A Symbolic Procedure for Control Reachability in the Asynchronous Pi-calculus Proc. of Infinity 2003, a Satellite workshop of Concur 03, September 2003. To appear in the Electronic Notes in Theoretical Computer Science.
- [35] G. Delzanno and P. Ganty Automatic Verification of Time-sensitive Cryptographic Protocols In Proc. of TACAS 2004, LNCS, April 2004.
- [36] SAT-based Analysis of Cellular Automata Massimo D'Antonio and Giorgio Delzanno In Proc. of ACRI 2004, LNCS, 2004.
- [37] BDIATL : An Alternating-Time BDI Logic for Multiagent Systems Roberto Montagna, Giorgio Delzanno, Maurizio Martelli, and Viviana Mascardi In Proc. EUMAS 2005, 2005.
- [38] Compositional Verification of Asynchronous Processes via Constraint Solving Giorgio Delzanno and Maurizio Gabbrielli. In Proc. ICALP 2005, LNCS, 2005.
- [39] A Compositional Semantics for CHR Giorgio Delzanno, Maurizio Gabbrielli and Maria Chiara Meo In Proc. PPDP 2005, ACM Press, 2005.
- [40] Giorgio Delzanno and Roberto Montagna Reachability Analysis of Mobile Ambients in Fragments of AC Term Rewriting In Proc. ICTAC 2006, LNCS, 2006.
- [41] Giorgio Delzanno, Javier Esparza and Jiri Srba Monotonic Set-Extended Prefix Rewriting and Verification of Recursive Ping-Pong Protocols In Proc. ATVA 2006, LNCS, 2006.
- [42] Giorgio Delzanno and Roberto Montagna On the Reachability Problem for Fragments of Mobile Ambients with Name Restriction In Proc. Infinity 2006, To appear in ENTCS, 2006.
- [43] Giorgio Delzanno and Roberto Montagna On Reachability and Spatial Reachability for Fragments of BioAmbients In Proc. MeCBIC 2006, To appear in ENTCS, 2006.
- [44] Parosh Aziz Abdulla and Giorgio Delzanno On the Coverability Problem for Constrained Multiset Rewriting In Proc. AVIS 2006, To appear in ENTCS 2006.
- [45] Parosh Aziz Abdulla, Giorgio Delzanno, and Ahmed Rezine Parameterized Verification of Infinite-state Processes with Global Conditions In Proc. CAV 2007, LNCS, 2007.
- [46] Parosh Aziz Abdulla, Noomene Ben Henda, Giorgio Delzanno, and Ahmed Rezine Regular model checking without transducers In Proc. TACAS 2007, LNCS, 2007.
- [47] P. A. Abdulla, G. Delzanno, and L. Van Begin. Comparing the Expressive Power of Well-Structured Transition Systems. In Proc. Computer Science Logic Conference (CSL 2007), pp. 99-114, LNCS 4646, 2007.

- [48] G. Delzanno, L. Van Begin. On the Dynamics of PB Systems with Volatile Membranes. In Proc. Workshop on Membrane Computing (WMC), 2007: 240-256.
- [49] P. A. Abdulla, N. Ben Henda, G. Delzanno, F. Haziza, A. Rezine. Parameterized Tree Systems. In Proc. IFIP WG 6.1 Int. Conf. on Formal Techniques for Networked and Distributed Systems (FORTE 2008), pp. 69-83, LNCS 5048, 2008.
- [50] P. A. Abdulla, N. Ben Henda, G. Delzanno, A. Rezine. Handling Parameterized Systems with Non-atomic Global Conditions. In Proc. Int. Conf on Verification, Model Checking, and Abstract Interpretation (VMCAI 2008), pp. 22-36, LNCS 4905, 2008.
- [51] P. Abdulla, G. Delzanno, and L. Van Begin. On the Qualitative Analysis of Conformon P-systems. In Proc. Workshop on Membrane Computing (WMC), 2008.  
*Best paper award WMC 2008.*
- [52] G. Delzanno and L. Van Begin. A Biologically Inspired Model with Fusion and Clonation of Membranes. To appear in Proc. Int. Conf. on Unconventional Computation (UC 2008).
- [53] P. A. Abdulla, G. Delzanno, and A. Rezine. Monotonic Abstraction in Action (Automatic Verification of Distributed Mutex Algorithms). To appear in Proc. Int. Conf. ICTAC 2008.
- [54] P. A. Abdulla, G. Delzanno, and A. Rezine. Monotonic Abstraction for Parameterized Verification. To appear in Proc. Int. Workshop on Reachability Problems (RP 2008).