

Curriculum Vitæ et Studiorum

Paolo Baldan

MAY 2, 2025

GENERAL DATA

Born: DOLO (VENEZIA), APRIL, 14 1969.
Address: VENEZIA (VE), Via Benedetto Marcello 9, c.a.p. 30171.
Citizenship ITALIAN.
Current Position: FULL PROFESSOR
Department of Mathematics, University of Padova.

EDUCATION

- 1989** High school diploma with grade 60/60 at “ITIS Francesco Severi” (Padova).
- 1994** M.Sc. degree in Computer Science (110/110 summa cum laude) at the University of Udine, with the thesis “*A fixed point theorem for the solution of domain equations in a category of trees*” (supervisors: Furio Honsell, Fabio Alessi).
- 2000** PhD in Computer Science at the University of Pisa, with the thesis “*Modelling Concurrent Computation: from Contextual Petri Nets to Graph Grammars*” (supervisors: Ugo Montanari, Andrea Corradini).
- 2000–2001** PostDoc Researcher at the Computer Science Department of the University of Pisa.
- 2001–2006** Assistant professor at the Computer Science Department of the University “Ca’ Foscari” of Venice.
- 2006–2020** Associate professor at the Department of Mathematics of the University of Padova.
- 2020–today** Full professor at the Department of Mathematics of the University of Padova.

RESEARCH ACTIVITY

◇ Research Interests

Generally speaking, I am interested in *languages, models and verification techniques for concurrent and distributed systems*.

More in detail I have been working on:

- Foundations of the so-called *truly concurrent* semantics, i.e., semantics that provide an explicit and faithful representation of the concurrency properties of the behaviour of a system (e.g., parallelism or causality) with special attention to specification formalisms ranging from *Petri nets* (and their generalisations) to *graph transformation systems* and *process calculi*. For these formalisms I contributed to the development of semantics based, e.g., on traces, processes, unfoldings and event structures, possibly in a categorical setting.

- *Logics and analysis techniques* for concurrent and distributed systems, relying on their truly concurrent semantics. These include techniques for the verification of infinite state systems, based on the approximation of their unfolding semantics and techniques for model-based diagnosis of concurrent systems.

I also contributed to the design of *behavioural logics* for expressing concurrency properties of the modelled systems and to the development of corresponding model checking techniques. Such logics represent the logical counterpart of classical true behavioural concurrent equivalences and allow one to express properties related to the concurrent behaviour, like degree of parallelism, atomicity or noninterference.

I have been working also on *quantitative approaches* to the semantics, that naturally arise when considering the behavior of system models embodying information, such as probabilities, time or cost. In particular, I have been studying the foundations of approaches that use *metric spaces* as semantic domains, contributing to the development of techniques for the solution of *metric domain equations*, *computational models* for metric and topological spaces, and coalgebraic techniques for the definition of quantitative observational semantics.

I am also interested in the use of formalisms for concurrency in the modelling and analysis of *bio-systems*. I have also been investigating the use of concurrency models in the area of *process mining*.

◇ Awards

- EATCS “Best Theoretical Paper” award for the paper “Approximating the Behaviour of Graph Transformation Systems” (joint work with B. König), presented at the *1st International Conference on Graph Transformation*, 2002.
- EATCS “Best Theoretical Paper” award for the paper “Graph Transactions as Processes” (joint work with A. Corradini, L. Foss, F. Gadducci), presented at the *3rd International Conference on Graph Transformation*, 2006.
- *Most influential paper in 8 years of ICGT (International Conference on Graph Transformation)* for the paper “Approximating the Behaviour of Graph Transformation Systems” (joint work with B. König) awarded at the 2010 edition of the conference.

- *Outstanding Paper Award* for the paper “Non-interference by unfolding” (joint work with A. Carraro), presented at the *35th International Conference on Application and Theory of Petri Nets and Concurrency*, 2014.

◇ National and International Projects

Scientific Responsibility

- MIUR Project *ART (Analisi di sistemi di Riduzione mediante sistemi di Transizione)*, 2005–2006 (Site Coordinator).
- Project *Analysis, Verification and abstract Interpretation of MOdels for concurrency (AVIAMO)*, funded by the University of Padova, 2009–2010 (Coordinator).
- MIUR Project *SisteR (Sistemi di Riduzione: sintesi, raffinamento e verifica di modelli comportamentali)*, 2010–2011 (Site Coordinator).
- Project *static ANalysis of COncurrent and REactive software systems (ANCORE)*, funded by the University of Padova, 2015–2016 (Coordinator).

Exchange projects

- Bilateral Italian/German project: *Models based on Graph Transformation Systems: Analysis and Verification*, CRUI/ DAAD Programma Vigoni, 2004 and 2006 (Italian Coordinator).
- Exchange project with LIF (Laboratoire d’Informatique Fondamentale) Marseille, 2009–2010 (Italian referent).

Project Participations

International Projects

- EU Project *MASK (Mathematical Structures in Concurrency)*, 1994–1995.
- EU Project *Lambda Calcul Typé*, 1997–1998.
- EC TMR Project *GETGRATS (GEneral Theory of GRaphs TransformationS)*, 1997–2000.
- IST Programme on FET-GC *AGILE (Architectures for Mobility)*, 2002–2005.
- CNR/CNPq Project *IQ-Mobile II (Improving the Quality of Open Systems with Code Mobility through Rigorous Development)*, 2002–2004.
- EC RTN Project *SeGraVis (Semantic and Syntactic Integration of Visual Modeling Techniques)*, 2003–2006.

National Projects

- MURST Project *Tecniche Formali per la Specifica, l’Analisi, la Verifica, la Sintesi e la Trasformazione di Sistemi Software*, 2000–2001.
- MURST Project *TOSCa (Tipi, Ordine Superiore e Concorrenza (Types, Higher Order and Concurrency))*, 2001–2002.

- MIUR Project *CoMeta (Computational Metamodels)*, 2003–2004.
- MIUR Project *CINA: Compositionality, Interaction, Negotiation, Autonomicity for the future ICT society*, 2012-2015.
- MIUR Project *ASPRA: Analysis of Program Analyses*, 2019-2022.
- MUR Project *RAP: Resource Awareness in Programming: Algebra, Rewriting, and Analysis*, 2023-2025.

◇ International Research Fellowships

- 2000 (*20 Jun – 20 Jul*) Computer Science Department of the Technische Universität Berlin, for a collaboration with Prof. H. Ehrig.
- 2003 (*9 Oct – 11 Nov*) Computer Science Department of the Universidade Federal do Rio Grande do Sul, for a collaboration with Prof. L. Ribeiro.
- 2004 (*12 Jul – 10 Aug*) Computer Science Department of the Technische Universität Berlin, for a collaboration with Prof. H. Ehrig.
 (*5 Dec – 26 Dec*) Computer Science Department of “Pontificia Universidade Catholica do Rio Grande do Sul”, for a collaboration with prof. L. Ribeiro and Prof. F. Dotti.
- 2005 (*14 Jul – 14 Aug*) Computer Science Department of Technische Universität Berlin, for a collaboration with prof. H. Ehrig.
- 2006 (*15 Jul – 15 Aug*) Computer Science Department of Technische Universität Berlin, for a collaboration with prof. H. Ehrig.

PUBLICATIONS

◇ International Journals

- [0] Fabio Alessi, Paolo Baldan, and Gianna Bellè. “A Fixed Point Theorem in a Category of Compact Metric spaces”. In: *Theoretical Computer Science* 146(1–2) (1995), pp. 311–320.
- [0] Fabio Alessi and Paolo Baldan. “A Characterization of Distance between 1-Bounded Compact Ultrametric spaces through a Universal Space”. In: *Theoretical Computer Science* 190(1–2) (1998), pp. 113–127.
- [0] Paolo Baldan, Giorgio Ghelli, and Alessandra Raffaetà. “Basic Theory of F-Bounded Quantification”. In: *Information and Computation* 153(1) (1999), pp. 173–237.
- [0] Paolo Baldan, Andrea Corradini, and Ugo Montanari. “Contextual Petri nets, asymmetric event structures and processes”. In: *Information and Computation* 171(1) (2001), pp. 1–49.
- [0] Fabio Alessi, Paolo Baldan, and Furio Honsell. “A category of compositional domain-models for separable Stone spaces”. In: *Theoretical Computer Science* 290(1) (2003), pp. 599–635.

- [0] Paolo Baldan, Nadia Busi, Andrea Corradini, and Giovanni Michele Pinna. “Domain and Event Structure Semantics for Petri Nets with Read and Inhibitor arcs”. In: *Theoretical Computer Science* 323(1–3) (2004), pp. 129–189.
- [0] Paolo Baldan, Andrea Corradini, Hartmut Ehrig, and Reiko Heckel. “Compositional Semantics for Open Petri Nets based on Deterministic Processes”. In: *Mathematical Structures in Computer Science* 15(1) (2005), pp. 1–35.
- [0] Paolo Baldan, Clara Bertolissi, Horatiu Cirstea, and Claude Kirchner. “A rewriting calculus for cyclic higher-order term graphs”. In: *Mathematical Structures in Computer Science* 17(3) (2007), pp. 363–406.
- [0] Paolo Baldan, Andrea Bracciali, and Roberto Bruni. “A Semantic Framework for Open Processes”. In: *Theoretical Computer Science* 3(1) (2007), pp. 446–483.
- [0] Paolo Baldan, Andrea Corradini, Ugo Montanari, and Leila Ribeiro. “Unfolding Semantics of Graph Transformation”. In: *Information and Computation* 205 (2007), pp. 733–782.
- [0] Paolo Baldan, Andrea Corradini, Hartmut Ehrig, Reiko Heckel, and Barbara König. “Bisimilarity and Behaviour-Preserving Reconfigurations of Petri Nets”. In: *Logical Methods in Computer Science* 4(4–3) (2008), pp. 1–41.
- [0] Paolo Baldan, Andrea Corradini, and Barbara König. “A Framework for the Verification of Infinite-State Graph Transformation Systems”. In: *Information and Computation* 206 (2008), pp. 869–907.
- [0] Paolo Baldan, Andrea Corradini, Barbara König, and Stefan Schwoon. “McMillan’s Complete Prefix for Contextual Nets”. In: *LNCS Transactions on Petri Nets and Other Models of Concurrency* 5100 (2008), pp. 199–220.
- [0] Paolo Baldan, Thomas Chatain, Stefan Haar, and Barbara König. “Unfolding-Based Diagnosis of Systems with an Evolving Topology”. In: *Information and Computation* 208(10) (2010), pp. 1169–1192.
- [0] Paolo Baldan, Nicoletta Cocco, Andrea Marin, and Marta Simeoni. “Petri Nets for Modelling Metabolic Pathways: A Survey”. In: *Natural Computing* 9 (2010), pp. 955–989.
- [0] Paolo Baldan, Filippo Bonchi, Andrea Corradini, and Barbara König. “A lattice-theoretical perspective on adhesive categories”. In: *Journal of Symbolic Computation* 46(3) (2011), pp. 222–245.
- [0] Paolo Baldan, Alessandro Bruni, Andrea Corradini, Barbara König, Stefan Schwoon, and Cesar Rodríguez. “Efficient Unfolding of Contextual Petri nets”. In: *Theoretical Computer Science* 449(1) (2012), pp. 2–22.
- [0] Paolo Baldan, Nicoletta Cocco, Federica Giummolè, and Marta Simeoni. “Comparing Metabolic Pathways through Reactions and Potential Fluxes”. In: *LNCS Transactions on Petri Nets and Other Models of Concurrency* 8100 (2013). Ed. by Maciej Koutny, Wil M.P. van der Aalst, and Alex Yakovlev, pp. 1–23.
- [0] Paolo Baldan, Andrea Corradini, Tobias Heindel, Barbara König, and Paweł Sobociński. “Processes and Unfoldings: Concurrent Computations in Adhesive Categories”. In: *Mathematical Structures in Computer Science* 24(4) (2014), pp. 1–51.
- [0] Paolo Baldan and Silvia Crafa. “A Logic for True Concurrency”. In: *Journal of the ACM* 61(4) (2014), 24:1–24:36.

- [0] Paolo Baldan, Filippo Bonchi, Fabio Gadducci, and Giacomina Valentina Monreale. “Concurrency Can’t Be Observed, Asynchronously”. In: *Mathematical Structures in Computer Science* 25(4) (2015), pp. 978–1004.
- [0] Paolo Baldan, Filippo Bonchi, Fabio Gadducci, and Giacomina Valentina Monreale. “Modular Encoding of Synchronous and Asynchronous Interactions using Open Petri Nets”. In: *Science of Computer Programming* 109 (2015), pp. 96–124.
- [0] Paolo Baldan and Alberto Carraro. “A Causal View on Non-Interference”. In: *Fundamenta Informaticae* 140(1) (2015), pp. 1–38.
- [0] Abel Armas-Cervantes, Paolo Baldan, Marlon Dumas, and Luciano García-Bañuelos. “Diagnosing behavioral differences between business process models: An approach based on event structures”. In: *Information Systems* 56 (2016), pp. 304–325.
- [0] Abel Armas-Cervantes, Paolo Baldan, and Luciano García-Bañuelos. “Reduction of event structures under history preserving bisimulation”. In: *Journal of Logical and Algebraic Methods in Programming* 85(6) (2016), pp. 1110–1130.
- [0] Paolo Baldan and Alessandro Beggiato. “Multilevel Transitive and Intransitive Non-Interference, Causally”. In: *Theoretical Computer Science* 706 (2018), pp. 54–82.
- [0] Paolo Baldan, Martina Bocci, Daniele Brigolin, Nicoletta Cocco, Monika Heiner, and Marta Simeoni. “Petri nets for modelling and analysing trophic networks”. In: *Fundamenta Informaticae* 160(1–2) (2018), pp. 27–52.
- [0] Paolo Baldan, Filippo Bonchi, Henning Kerstan, and Barbara König. “Coalgebraic behavioral metrics”. In: *Logical Methods in Computer Science* 14(3) (2018). Selected Papers of the 6th Conference on Algebra and Coalgebra in Computer Science (CALCO 2015), pp. 1–61. URL: <https://lmcs.episciences.org/4827>.
- [0] Paolo Baldan, Roberto Bruni, Andrea Corradini, Hernán C. Melgratti, and Ugo Montanari. “Event Structures for Petri nets with Persistence”. In: *Logical Methods in Computer Science* 14(3) (2018), pp. 1–30. URL: <https://lmcs.episciences.org/4857>.
- [0] Paolo Baldan and Alberto Lluch-Lafuente. “Many-to-Many Information Flow Policies”. In: *Science of Computer Programming* 168 (2018), pp. 118–141.
- [0] Paolo Baldan and Fabio Gadducci. “Petri nets are dioids: a new algebraic foundation for non-deterministic net theory”. In: *Acta Informatica* 56(1) (2019), pp. 61–92.
- [0] Paolo Baldan, Barbara König, Christina Mika-Michalski, and Tommaso Padoan. “Fixpoint Games in Continuous Lattices”. In: *PACMPL* 3(POPL) (2019), 26:1–26:29.
- [0] Paolo Baldan and Tommaso Padoan. “Model Checking a Logic for True Concurrency”. In: *ACM Trans. Comput. Log.* 21(4) (2020), 34:1–34:49.
- [0] Paolo Baldan, Andrea Corradini, and Fabio Gadducci. “Concurrent semantics for fusions: Weak prime domains and connected event structures”. In: *Information and Computation* 281 (2021).
- [0] Paolo Baldan, Daniele Gorla, Tommaso Padoan, and Ivano Salvo. “Behavioural logics for configuration structures”. In: *Theoretical Computer Science* 913 (2022), pp. 94–112.

- [0] Paolo Baldan, Daniele Gorla, Tommaso Padoan, and Ivano Salvo. “Characterizing Spectra of Equivalences for Event Structures, logically”. In: *Information and Computation* 285 (2022).
- [0] Paolo Baldan and Alessandra Raffaetà. “Minimisation of event structures”. In: *Theoretical Computer Science* 935 (2022), pp. 174–199.
- [0] Paolo Baldan, Francesco Ranzato, and Linpeng Zhang. “Intensional Kleene and Rice theorems for abstract program semantics”. In: *Information and Computation* 289 (2022).
- [0] Paolo Baldan, Richard Eggert, Barbara König, and Tommaso Padoan. “Fixpoint Theory - Upside Down”. In: *Logical Methods in Computer Science* 19(2) (2023).

◇ Proceedings of International Conferences

- [0] Fabio Alessi, Paolo Baldan, Gianna Bellè, and Jan J.M.M. Rutten. “Functorial and Non-Functorial Solution of Metric Domain Equations”. In: *Proceedings of MFPS’95*. Ed. by Stephen D. Brookes, Michael G. Main, Austin Melton, and Michael W. Mislove. Vol. 1. Electronic Notes in Theoretical Computer Science. Springer, 1995.
- [0] Fabio Alessi, Paolo Baldan, and Furio Honsell. “Partializing Stone Spaces Using SFP Domains”. In: *Proceedings of TAPSOFT’97*. Ed. by Michel Bidoit and Max Douchet. Vol. 1214. LNCS. Springer, 1997, pp. 478–490.
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- [0] Paolo Baldan, Andrea Corradini, and Ugo Montanari. “Concatenable graph processes: relating processes and derivation traces”. In: *Proceedings of ICALP’98*. Vol. 1443. LNCS. Springer, 1998, pp. 283–295.
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- [0] Paolo Baldan, Andrea Corradini, and Ugo Montanari. “Unfolding of Double-Pushout Graph Grammars is a Coreflection”. In: *Proceedings of TAGT’98*. Ed. by Hartmut Ehrig, Gregor Engels, Hans-Jörg Kreowski, and Grzegorz Rozenberg. Vol. 1764. LNCS. Springer, 1999, pp. 145–163.
- [0] Paolo Baldan, Nadia Busi, Andrea Corradini, and Giovanni Michele Pinna. “Functorial Concurrent Semantics for Petri Nets with Read and Inhibitor Arcs”. In: *Proceedings of CONCUR’00*. Ed. by Catuscia Palamidessi. Vol. 1877. LNCS. Springer, 2000, pp. 442–457.
- [0] Paolo Baldan, Andrea Corradini, and Ugo Montanari. “History Preserving Bisimulations for Contextual nets”. In: *Proceedings of WADT’99*. Ed. by Didier Bert and Christine Choppy. LNCS 1827. Springer, 2000, pp. 291–310.
- [0] Paolo Baldan. “Concurrency for Graph Grammars (in a Petri net shell)”. In: vol. 51. Electronic Notes in Theoretical Computer Science. Elsevier Science, 2001.
- [0] Paolo Baldan, Andrea Corradini, Hartmut Ehrig, and Reiko Heckel. “Compositional modeling of reactive systems using open nets”. In: *Proceedings of CONCUR’01*. Ed. by Kim G. Larsen and Mogens Nielsen. Vol. 2154. LNCS. Springer, 2001, pp. 502–518.

- [0] Paolo Baldan, Andrea Corradini, and Barbara König. “A static analysis technique for graph transformation systems”. In: *Proceedings of CONCUR’01*. Ed. by Kim G. Larsen and Mogens Nielsen. Vol. 2154. LNCS. Springer, 2001, pp. 381–395.
- [0] Paolo Baldan, Andrea Bracciali, and Roberto Bruni. “Bisimulation by Unification”. In: *Proceedings of AMAST 2002*. Ed. by Hélène Kirchner and Christophe Ringeissen. Vol. 2422. LNCS. Springer, 2002, pp. 254–270.
- [0] Paolo Baldan, Andrea Corradini, and Barbara König. “Static Analysis of Distributed Systems with Mobility Specified by Graph Grammars—A Case Study”. In: *Proceedings of IDPT 2002 (Sixth International Conference on Integrated Design & Process Technology)*. Ed. by Hartmut Ehrig, Bernd J. Krämer, and Atila Ertas. Society for Design and Process Science, 2002.
- [0] Paolo Baldan and Barbara König. “Approximating the behaviour of graph transformation systems”. In: *Proceedings of ICGT’02*. Ed. by Andrea Corradini, Hartmut Ehrig, Hans-Jörg Kreowski, and Grzegorz Rozenberg. Vol. 2505. LNCS. Springer, 2002, pp. 14–30.
- [0] L. Andrade et al. “AGILE: Software Architecture for Mobility”. In: *Proceedings of WADT’02*. Ed. by Martin Wirsing, Dirk Pattinson, and Rolf Hennicker. Vol. 2755. LNCS. Springer, 2003, pp. 1–33.
- [0] Paolo Baldan, Roberto Bruni, and Ugo Montanari. “Pre-nets, read arcs and unfolding: a functorial presentation”. In: *Proceedings of WADT’02*. Ed. by Martin Wirsing, Dirk Pattinson, and Rolf Hennicker. Vol. 2755. LNCS. Springer, 2003, pp. 145–164.
- [0] Paolo Baldan, Andrea Corradini, Ugo Montanari, and Leila Ribeiro. “Coreflective Concurrent Semantics for Single-Pushout Graph Grammars”. In: *Proceedings of WADT’02*. Ed. by Martin Wirsing, Dirk Pattinson, and Rolf Hennicker. Vol. 2755. LNCS. Springer, 2003, pp. 165–184.
- [0] Paolo Baldan, Barbara König, and Barbara König. “A Logic for Analyzing Abstractions of Graph Transformation Systems”. In: *Proceedings of SAS’03 (International Static Analysis Symposium)*. Ed. by Radhia Cousot. Vol. 2694. LNCS. Springer, 2003, pp. 255–272.
- [0] Paolo Baldan, Clara Bertolissi, Horatiu Cirstea, and Claude Kirchner. “A rewriting calculus for cyclic higher-order term graphs”. In: *Proceedings of TERMGRAPH’04*. Ed. by Maribel Fernández. Vol. 127. Electronic Notes in Theoretical Computer Science 5. Elsevier, 2004, pp. 21–41.
- [0] Paolo Baldan, Andrea Corradini, and Barbara König. “Verifying Finite-State Graph Grammars: an Unfolding-Based Approach”. In: *Proceedings of CONCUR’04*. Ed. by Philippa Gardner and Nobuko Yoshida. Vol. 3170. LNCS. Springer, 2004, pp. 83–98.
- [0] Paolo Baldan, Andrea Corradini, Barbara König, and Barbara König. “Verifying a Behavioural Logic for Graph Transformation Systems”. In: *Proceedings of CoMeta’03*. Ed. by Furio Honsell, Marina Lenisa, and Marino Miculan. Vol. 104. Electronic Notes in Theoretical Computer Science C. Elsevier Science, 2004, pp. 5–24.
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- [0] Paolo Baldan, Andrea Corradini, Luciana Foss, and Fabio Gadducci. “Graph Transactions as Processes”. In: *Proceedings of ICGT’06*. Ed. by Andrea Corradini, Hartmut Ehrig, Ugo Montanari, Leila Ribeiro, and Grzegorz Rozenberg. Vol. 4178. LNCS. Springer, 2006, pp. 199–214.
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◇ **Book Chapters**

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- [0] Paolo Baldan, Andrea Corradini, and Barbara König. “Unfolding Graph Transformation Systems: Theory and Applications to Verification”. In: *Concurrency, Graphs and Models, Essays Dedicated to Ugo Montanari on the Occasion of His 65th Birthday*. Ed. by Pierpaolo Degano, Rocco De Nicola, and José Meseguer. Vol. 5065. LNCS. Springer, 2008, pp. 16–36.

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◇ **Theses**

- [0] Paolo Baldan. *Un Teorema di Punto Fisso per la Soluzione di Equazioni di Dominio in una Categoria di Alberi*. Master Thesis. 1994.
- [0] Paolo Baldan. “Modelling concurrent computations: from contextual Petri nets to graph grammars”. Available as technical report n. TD-1/00. PhD thesis. Department of Computer Science, University of Pisa, 2000.

ORGANISATION ACTIVITY

◇ **Organisation and chairing**

I have been organising the following events:

- *PNGT 2006 (2nd Workshop on Petri Nets and Graph Transformation)* (co-chair).
- *PNGT 2008 (3rd Workshop on Petri Nets and Graph Transformation)* (co-chair).
- *CONCUR 2014 (25th International Conference on Concurrency Theory)* (co-chair)
- *Winter School in Computer Science* (I Escuela de Invierno en Ciencia de la Computación), University of La Habana (Cuba), Jan 30 - Feb 3, 2017.
- *Winter School in Computer Science* (II Escuela de Invierno en Ciencia de la Computación), University of La Habana (Cuba), Jan 29 - Feb 2, 2018.
- *CALCO 2023 (10th International Conference on Algebra and Coalgebra in Computer Science)* (co-chair)

◇ **Program Committees**

I have been serving in the program committee of many international workshops and conferences:

- *GT-VC 2005 (Graph Transformation for Verification and Concurrency)*.
- *GT-VMT 2006 (5th International Workshop on Graph Transformation and Visual Modeling Techniques)*.

- *ICGT 2006 (International Conference on Graph Transformation).*
- *SMBF 2006 (Brazilian Symposium on Formal Methods).*
- *GT-VC 2006 (Graph Transformation for Verification and Concurrency).*
- *3rd Workshop on the Rewriting Calculus, 2006.*
- *GT-VMT 2007 (6th International Workshop on Graph Transformation and Visual Modeling Techniques).*
- *GT-VC 2007 (Graph Transformation for Verification and Concurrency).*
- *GT-VMT 2008 (7th International Workshop on Graph Transformation and Visual Modeling Techniques).*
- *ICGT 2008 (4th International Conference on Graph Transformation).*
- *GT-VMT 2009 (8th International Workshop on Graph Transformation and Visual Modeling Techniques).*
- *GT-VMT 2010 (9th International Workshop on Graph Transformation and Visual Modeling Techniques).*
- *ICGT 2010 (5th International Conference on Graph Transformation).*
- *ICE 2010 - 3rd Interaction and Concurrency Experience (focus on Guaranteed Interaction).*
- *AMAST 2010 (30th International Conference on Algebraic Methodology And Software Technology).*
- *CONCUR 2011 (22nd International Conference on Concurrency Theory).*
- *GT-VMT 2011 (10th International Workshop on Graph Transformation and Visual Modeling Techniques).*
- *TERMGRAPH 2011 (6th International Workshop on Computing with Terms and Graphs)*
- *CALCO Tools 2011*
- *GT-VMT 2012 (11th International Workshop on Graph Transformation and Visual Modeling Techniques).*
- *RTA 2012 (23rd International Conference on Rewriting Techniques and Applications)*
- *PNGT 2012 (5th International Workshop on Petri Nets, Graph Transformation and other Concurrency Formalisms)*
- *GCM 2012 (4th International Workshop on Graph Computation Models)*
- *ICGT 2012 (6th International Conference on Graph Transformation)*
- *GT-VMT 2013 (12th International Workshop on Graph Transformation and Visual Modeling Techniques).*

- *TERMGRAPH 2013 (7th International Workshop on Computing with Terms and Graphs)*
- *CONCUR 2013 (24th International Conference on Concurrency Theory)*
- *ICTCS 2014 (15th Italian Conference on Theoretical Computer Science)*
- *ICALP 2014 (41st International Colloquium on Automata, Languages, Programming)*
- *ICGT 2014 (7th International Conference on Graph Transformation)*
- *ICGT 2015 (8th International Conference on Graph Transformation)*
- *CILC 2015 (30esimo Convegno Italiano di Logica Computazionale)*
- *RCRA 2015 (22nd International Workshop on "Experimental Evaluation of Algorithms for solving problems with combinatorial explosion")*
- *CMCS 2016 (13th International Workshop on Coalgebraic Methods in Computer Science)*
- *ICGT 2017 (10th International Conference on Graph Transformation)*
- *CILC 2017 (32esimo Convegno Italiano di Logica Computazionale)*
- *CONCUR 2017 (28th International Conference on Concurrency Theory)*
- *ICGT 2018 (11th International Conference on Graph Transformation)*
- *WADT 2018 (24th International Workshop on Algebraic Development Techniques)*
- *Petri nets 2019 (40th International Conference on Application and Theory of Petri Nets and Concurrency)*
- *ICTCS 2019 (20th Italian Conference on Theoretical Computer Science)*
- *FoSSaCS 2020 (23rd International Conference on Foundations of Software Science and Computation Structures)*
- *ICGT 2020 (13th International Conference on Graph Transformation)*
- *MFCS 2020 (45th International Symposium on Mathematical Foundations of Computer Science)*
- *Petri nets 2021 (42nd International Conference on Application and Theory of Petri Nets and Concurrency)*
- *CALCO 2021 (9th Conference on Algebra and Coalgebra in Computer Science)*
- *ICGT 2021 (14th International Conference on Graph Transformation)*
- *CONCUR 2021 (32nd International Conference on Concurrency Theory)*
- *ICGT 2022 (15th International Conference on Graph Transformation)*
- *Petri nets 2022 (43rd International Conference on Application and Theory of Petri Nets and Concurrency)*

- *Petri nets 2023 (44th International Conference on Application and Theory of Petri Nets and Concurrency)*
- *MFPS 2024 (40th Conference on the Mathematical Foundations of Programming Semantics)*
- *SAS 2024 (31st Static Analysis Symposium)*

◇ **Reviewing activity**

I have been serving as a reviewer for many international conferences and journals:

1. *International Conferences*

AMAST, ACM GIS, AGT, ATPN, CALCO, CMSB, CONCUR, Coordination, CILC, CSL, CSFW, EXPRESS, ESSLI, ETAPS, FMSE, FSCD, FSTTCS, FORTE, GaM, GT-VMT, HAPOC, ICALP, ICGT, ICLP, ICTCS, LATA, LICS, MFCS, PaCT, PEPM, PPDP, RTA, RCRA, SBMF, SOFSEM, TAGT, Termgraph, VMCAI, WADT, WOOD, WRLA, WS-FM

2. *International Journals*

“*Computer Languages, Systems & Structures*”, “*Fundamenta Informaticæ*”, “*IEEE Transactions on Computer*”, “*Information and Computation*”, “*Information Processing Letters*”, “*Logical Methods in Computer Science*”, “*Journal of Algebraic and Logic Programming*”, “*Journal of Visual Languages and Computing*”, “*Mathematical Structures in Computer Science*”, “*Software and System Modeling*”, “*Theoretical Computer Science*”, “*The Computer Journal*”, “*Transactions on Petri Nets and Other Models of Concurrency*”.

TEACHING AND SUPERVISING ACTIVITY

I have been teaching various courses both on applied and theoretical subjects, at undergraduate and graduate levels of the Computer Science degree. A detailed list follows:

(1998–2001) University of Pisa. Course on:

- *Foundations of Computer Science: Semantics* (assistant)
- *Programming Laboratory* (assistant)
- *Operational research* (assistant)

(2002–2007) University Ca’ Foscari of Venice. Courses on

- *Computer System Architecture* (undergraduate)
- *Operating Systems* (undergraduate)
- *Operating System Laboratory* (undergraduate)
- *Mathematical Logic* (graduate)

(2007–2024) University of Padova. Courses on

- *Databases* (undergraduate)
- *Algorithms and Data Structures* (undergraduate)
- *Formal methods in concurrency* (graduate)
- *Computability and Algorithms* (graduate)
- *Languages for Global Computing* (graduate) - *Languages for Concurrency and Distribution* (graduate)

Supervising

While in Padova, I have been supervising 150 undergraduate, 22 master and 2 PhD students.

SERVICES AND ADMINISTRATIVE DUTIES

◇ PhD Juries

- [28 Oct 2006] Member of the PhD Jury of Dr. Clara Bertolissi at the Institut National Polytechnique de Lorraine - University of Nancy (France).
- [5 Nov 2008] Member of the PhD Jury of Dr. Oana Andrei at the Institut National Polytechnique de Lorraine - University of Nancy (France).
- [2 Apr 2009] Member of the PhD Jury of Dr. Fernando Jose Braz at the Computer Science Department - University Ca' Foscari of Venice.
- [2 Dec 2009] Member of the PhD Jury of Dr. Tobias Heindel at the Universität Duisburg-Essen (Germany).
- [20 May 2013] Member of the PhD Jury of Dr. Tiziana Cimoli at the University of Cagliari.
- [20 Apr 2016] Member of the PhD Jury of Dr. Kerstan Henning, at the Universität Duisburg-Essen (Germany).

◇ Administrative duties

- at the University Ca' Foscari of Venice:
 - [2002-2005]: Member of the *Library board (Commissione biblioteca)* - Computer Science Department.
 - [2004–2007] Examiner for Test Center ECDL (European Computer Driving Licence) - Computer Science Department. di Venezia.
- at the University of Padova
 - [2007–2012]: Member of the *Library board (Commissione biblioteca)* - Department of Mathematics.
 - [2011–2013]: Member of the *Committee for School Teachers Training (Commissione formazione insegnanti)* - Department of Mathematics.

- [2009–2014]: Member of *External Communication Committee Commissione Comunicazione Esterna* - Department of Mathematics.
- [2007–now]: Member of the *Bullettin committee (Commissione Bollettino-Notiziario)* for the degrees in Computer Science.
- [2009–2019]: Referent of the Department of Mathematics for the National and Regional Civil Service.
- [2008–2012], [2014–2018]: Member of the *Department Board (Giunta di Dipartimento)* - Department of Mathematics.
- [2009–now]: Member of the *Board of the PhD Program in Computer Science*, from 2013 *Brain, Mind and Computer Science (Collegio di Dottorato)*.
- [2012–now]: Member of the *Self Assessment Committee (Gruppo di Autovalutazione - GAV)* for the Degrees in Computer Science.
- [2015–2019]: Vice-chair of the *Board of the Degrees in Computer Science (Consiglio di Corso di Laurea)*.
- [2019–2023]: Chair of the *Board of the Degrees in Computer Science (Consiglio di Corso di Laurea)*.

DICHIARAZIONE SOSTITUTIVA DI CERTIFICAZIONE (ART. 46 D.P.R. 445/2000)

DICHIARAZIONE SOSTITUTIVA DELL'ATTO DI NOTORIETÀ (ART. 47, D.P.R. 445/2000)

Il sottoscritto Paolo Baldan, codice fiscale BLDPLA69D14D325Z nato a Dolo (VE) il 14/04/1969, residente in via Benedetto Marcello 9 C.A.P. 30171 Venezia (VE), consapevole delle sanzioni penali richiamate dall'art. 76 del D.P.R. 445/2000 per le ipotesi di falsità in atti e dichiarazioni mendaci dichiara che le informazioni riportate nel curriculum vitae, corrispondono a verità.

PADOVA, MAY 2, 2025

(Paolo Baldan)