

## PERSONAL INFORMATION

## Gabriele Puppis



Associate Professor  
Dept. of Mathematics, Computer Science, and Physics  
Udine University

 via delle Scienze 206, 33100 Udine, Italy

 [gabriele.puppis@uniud.it](mailto:gabriele.puppis@uniud.it)

 <https://users.dimi.uniud.it/~gabriele.puppis>

 <https://dblp.org/pid/37/3823.html>

 <https://scholar.google.com/citations?user=WW1HaMQAAAAJ>

 <https://orcid.org/0000-0001-9831-3264>

 <https://www.linkedin.com/in/gabriele-puppis-65ab074a>

Date of birth 9 March 1977 | Nationality Italian

## WORKING EXPERIENCES

2022 - present	Associate Professor at Udine University, Italy
2019 - 2022	Tenure-track researcher at Udine University, Italy
2012 - 2019	Tenured CNRS researcher at LaBRI, Bordeaux, France
2009 - 2012	Postdoc at Oxford University, UK
2006 - 2008	Postdoc at Udine University, Italy
2002 - 2006	Doctorand in Computer Science at Udine University, Italy

## AREAS OF EXPERTISES

## Logics

(classical logics, temporal and spatial logics, modal logics, descriptive logics, ontologies)

## Databases

(relational databases, query languages, logical foundations of database theory, finite model theory, tree and graph databases, spatio-temporal and probabilistic extensions)

## Formal languages

(grammars, finite-state automata, pushdown automata, register automata, timed automata, weighted and probabilistic automata, Markov processes, algebraic and logical characterizations of languages, game theory, algebraic geometry, learning)

## Data transformation

(automatic transformations of streams, one-way, two-way, and streaming string transducers, grammar-based transformations, algebraic and logical characterizations of transformatoins, learning)

## SCIENTIFIC QUALIFICATIONS

August 2018	<b>National Scientific Qualification for Associate Professor in Computer Science</b> Academic recruitment field: 01/B1 Computer Science.
-------------	---

- September 2019 [National Scientific Qualification for Full Professor in Mathematics](#)  
Academic recruitment field: 01/A1 Mathematical logic and complementary mathematics
- November 2021 [National Scientific Qualification for Full Professor in Computer Science](#)  
Academic recruitment field: 01/B1 Computer Science

## PRIZES AND GRANTS

---

- 2011 [ICALP Best Paper award](#)  
for the paper “Regular languages of words over countable linear orderings”
- 2010 [Junior Research Fellowship](#)  
at Linacre College of Oxford University
- 2009 [Research Member of the Common Room](#)  
at Wolfson College of Oxford University
- 2007 [E.W. Beth Dissertation Prize](#)  
awarded by FoLLI “Association for Logic, Language, and Information”
- 2005 [PhD mobility grant](#)  
Scientific collaboration with Prof. Wolfgang Thomas at RWTH Aachen University, Germany

## INVITED TALKS

---

I have been invited speaker at the following international workshops and conferences:

- 2023 [Dagstuhl seminar “Regular transformations”, Germany](#)  
<https://www.dagstuhl.de/en/seminars/seminar-calendar/seminar-details/23202>
- 2021 [Dagstuhl seminar “Unambiguity in automata theory”, Germany](#)  
<https://www.dagstuhl.de/en/seminars/seminar-calendar/seminar-details/21452>
- 2019 [Workshop “Trends in Transformations” in Chennai, India](#)  
<https://www.cse.iitb.ac.in/~krishnas/trends2019>
- 2018 [Workshop “The theory of regular cost functions and beyond” in Berlin, Germany](#)  
<https://regular-cost-functions.labri.fr>
- 2015 [Workshop “ACTS - Automata, Concurrency and Timed Systems” in Chennai, India](#)  
<https://www.cmi.ac.in/~sri/ACTS2015/index.html>
- 2015 [Conference “FRec - Frontiers of Recognizability” in Luminy, France](#)  
<https://arxiv.org/html/1411.5611>

I have been also invited at the following institutions to give presentations on my research outcomes:

- 2018 [Dept. of Mathematics, Computer Science, and Physics of Udine University, Italy](#)

- 2016 Dept. of Computer Science of Oxford University, UK
- 2015 IRIF “Institut de Recherche en Informatique Fondamentale” in Paris, France
- 2015 Dept. of Mathematics, Computer Science, and Physics of Udine University, Italy
- 2015 Dept. of Computer Science of Pontifical Catholic University of Chile, in Santiago
- 2015 Dept. of Computer Science of Buenos Aires University, Argentina
- 2015 LIFL “Laboratoire d’Informatique Fondamentale de Lille” in Lille, France
- 2012 LIAFA “Laboratoire d’informatique algorithmique: fondements et applications” in Paris, France
- 2007 Dept. of Computer Science of Verona University, Italia

## MONOGRAPHIC COURSES

---

- 2016 **Logical Foundations of Databases (8 hours, with Diego Figueira)**  
 “ESSLLI - European Summer School in Logic, Language and Information” in Bolzano, Italy  
[https://esslli2016.unibz.it/?page\\_id=384](https://esslli2016.unibz.it/?page_id=384)
- 2015 **Introduction to Logical Foundations of Databases (15 hours, with Diego Figueira)**  
 “ECI - Escuela de Ciencias Informáticas” in Buenos Aires, Argentina  
<http://www.dc.uba.ar/events/eci/2015/courses/figueira-puppis>
- 2015 **Techniques for Verification of Infinite State Systems (15 hours)**  
 Dept. of Mathematics, Computer Science, and Physics of Udine University, Italy
- 2006 **Verification of Infinite State Systems (8 hours)**  
 “ESSLLI - European Summer School in Logic, Language and Information” in Malaga, Spain  
<http://esslli2006.lcc.uma.es>

## SCIENTIFIC COMMITTEES

---

- 2023 **PC member of GandALF**  
 14th international symposium on “Games, Automata, Logics, and Formal verification” in Udine, Italy  
<https://gandalf23.uniud.it>
- 2022 **Member of the examination board for the final doctoral exams**  
 PhD in “Computer Science, Mathematics, and Physical Sciences” at Udine University, Italy
- 2022 **PC member of RP**  
 16th international conference on “Reachability Problems” in Kaiserslautern, Germany  
<https://rp2022.mpi-sws.org>

- 2022 **PC member of ICTCS**  
23rd “Italian Conference on Theoretical Computer Science” in Rome, Italy  
<https://easyconferences.eu/ictcs2022>
- 2021 - 2022 **Member of the PhD program committee**  
PhD in “Computer Science and Artificial Intelligence” at Udine University, Italy
- 2021 **Member of the admission board for the doctoral program**  
PhD in “Computer Science and Artificial Intelligence” at Udine University, Italy
- 2021 **PC member of MOVEP**  
15th summer school on “MOdelling and VERification of Parallel processes” in Aalborg, Denmark  
<https://movep2022.cs.aau.dk>
- 2021 **PC member of OVERLAY**  
3rd workshop on “Artificial Intelligence and fOrmal VERification, Logic, Automata, and sYnthesis” in Padua, Italy  
<https://overlay.uniud.it/workshop/2021>
- 2020 **PC member of MFCS**  
45th international symposium on “Mathematical Foundations of Computer Science” in Prague, Czech Republic  
<http://mfcs.mff.cuni.cz/2020>
- 2020 **PC member of Highlights**  
International conference “Highlights of Logic, Games, and Automata” in Aachen (virtually), Germany  
<https://web.archive.org/web/20210612121106/http://highlights-conference.org/online>
- 2019 **PC member of ICLA**  
8th “Indian Conference on Logic and its Applications” in Delhi, India  
<http://icla2019.cse.iitd.ac.in>
- 2018 **Member of the examination board for the doctoral dissertation**  
PhD in “Computer Science” at RWTH Aachen University, Germany
- 2017 **PC member of ICDT**  
20th “International Conference on Database Theory” in Venice, Italy  
<http://edbticdt2017.unive.it>
- 2014 **PC member of PODS**  
33rd ACM international symposium on “Principles of Database Systems” in Snowbird, USA  
<http://www.sigmod2014.org>
- 2014 **PC member of TIME**  
21st international symposium on “Temporal Representation and Reasoning” in Verona, Italy  
<http://time2014.di.univr.it>

- 2013 **PC co-chair, with Tiziano Villa, of GandALF**  
 4th international symposium on “Games, Automata, Logics, and Formal Verification” in Borca di Cadore, Italy  
<http://gandalf.di.univr.it>
- 2013 **PC member of WoLLIC**  
 20th edition of the “Workshop on Logic, Language, Information and Computation” in Darmstadt, Germany  
<http://wollic.org/wollic2013>
- 2012 **PC member of GandALF**  
 3rd international symposium on “Games, Automata, Logics, and Formal verification” in Naples, Italy  
<http://web.archive.org/web/20150908014813/http://www.gandalf.unina.it/index.php>
- 2011 **PC member of GandALF**  
 2nd international symposium on “Games, Automata, Logics, and Formal verification” in Minori, Italy  
<http://docenti.diem.unisa.it/parente/gandalf/2011>
- 2010 **PC member of GandALF**  
 1st international symposium on “Games, Automata, Logics, and Formal verification” in Minori, Italy  
<http://docenti.diem.unisa.it/parente/gandalf/2010>

I also frequently act as an external reviewer for papers submitted to workshops and conferences (e.g. LICS, ICALP, CONCUR, FOCS, FOSSACS, FSTTCS, STACS, PODS, EDBT/ICDT, MFCS, TIME, GandALF, CSL, LATA, WoLLIC, ICLA, DLT) and international journals (e.g. TheoretCS, Logical Methods in Computer Sciences, Theory of Database Systems, Information and Computation, Theoretical Computer Science, Theory of Computing Systems, Annals of Mathematics and Artificial Intelligence, Computer and System Sciences, Fundamenta Informaticae, Journal of the Association of Symbolic Logic, RAIRO Theoretical Informatics and Applications).

Furthermore, I have collaborated with some government institutions (e.g. ANR - French National Agency for Research, NCN - Polish National Scientific Center, FNRS - Duch National Fund for Scientific Research), acting as expert reviewer for the evaluation of research project proposals.

## EDITORIAL ACTIVITY

---

- 2023 - present **Editor for the proceedings of the annual ICALP conference**  
 “EATCS International Colloquium on Automata, Languages, and Programming”
- 2013 **Guest editor for a special issue of the international “Journal of Information and Computation”**  
 This special issue collected the best articles presented at the GandALF’13 symposium

## EVENT MANAGEMENT

---

- 2023 **Member of the organizing committee of the 3rd edition of the summer school on “Formal Methods for Cyber-Physical Systems”**  
<http://tcs.uniud.it>

- 2023 [Member of the organizing committee of GandALF](#)  
14th international symposium on “Games, Automata, Logics, and Formal Verification”  
<https://gandalf23.uniud.it>
- 2022 [Member of the organizing committee of AixIA](#)  
21st international conference of the “Italian Association for Artificial Intelligence”  
The conference was held in Udine, Italy, and had about 250 participants  
<https://aixia2022.uniud.it>
- 2019 [Member of the organizing committee of GandALF](#)  
10th international symposium on “Games, Automata, Logics, and Formal verification”  
The conference was held in Bordeaux, France, and had about 30 participants  
<https://gandalf2019.sciencesconf.org>
- 2016 [Member of the organizing committee of EDBT/ICDT](#)  
19th international conference on “Extending Database Technology” and 19th “International Conference on Database Theory”  
The conferences were jointly held in Bordeaux, France, and had about 250 participants  
<https://edbticdt2016.labri.fr>
- 2009 [Member of the organizing committee of GAMES](#)  
International workshop of the “ESF Research Networking Programme on Games for design and verification”  
The workshop was held in Udine, Italy, and had about 100 participants  
<http://games2009.dimi.uniud.it>

## PROJECTS AND RESEARCH GROUPS

---

- 2019 - 2023 [Member of the research project QUID](#)  
Research project on “Efficient Querying for Incomplete and Inconsistent Data”, funded by “ANR - Agence Nationale de la Recherche”  
<http://quid.labri.fr>
- 2016 - 2020 [Member of the research project DeLTA](#)  
Research project on “Défis pour la Logique, les Transducteurs et les Automates”, funded by “ANR - Agence Nationale de la Recherche”  
<http://delta.labri.fr>
- 2014 - 2018 [Member of the research project ExStream](#)  
Research project on “Extensions of Stream processing”, funded by “ANR - Agence Nationale de la Recherche”  
<http://www.labri.fr/perso/ogauwin/exstream>
- 2015 - 2017 [Member of the research project FoG](#)  
Research project on “Foundations of Graph Structured Data”, funded by “STIC-AmSud” (cooperation programme between France and South American countries)  
<https://glyc.dc.uba.ar/fog>

- 2012 - 2014 [Member of the research project FRec](#)  
 Research project on “Frontiers of Recognizability”, funded by “ANR - Agence Nationale de la Recherche”  
<https://frec.labri.fr>
- 2010 - 2010 [Member of the research project on “Logics, automata, and games for the formal verification of complex systems”](#)  
 Research project funded by “GNCS - Gruppo Nazionale per il Calcolo Scientifico”
- 2009 - 2012 [Member of the research project on “Enforcement of Constraints on XML Streams”](#)  
 Research project funded by “EPSRC - Engineering and Physical Sciences Research Council”  
<https://gow.epsrc.ukri.org/NGBOViewGrant.aspx?GrantRef=EP/G004021/1>
- 2008 - 2013 [Member of the research networking programme GAMES](#)  
 Research networking programme on “Games for Design and Verification”, funded by “ESF - European Science Foundation”  
<https://www.games.rwth-aachen.de>
- 2007 - 2007 [Member of the research networking programme AutoMathA](#)  
 Research networking programme on “Automata: from Mathematics to Applications”, funded by “ESF - European Science Foundation”  
<https://www.games.rwth-aachen.de>
- 2006 - 2007 [Member of the research project VIPER](#)  
 Research project on “Constraints and preferences as a unifying formalism for system analysis and solution of real-life problems”, funded by “MIUR - Ministero dell’Istruzione, dell’Università e della Ricerca”
- 2005 - 2006 [Member of the research project INTAS2004-77-7080](#)  
 Research project on “Algebraic and deduction methods in non-classical logics and their applications to Computer Science”, funded by “INTAS - International Association for the promotion of cooperation with scientists from the independent states of the former Soviet Union”  
<https://cordis.europa.eu/project/id/INTAS2004-77-7080>
- 2003 - 2004 [Member of the research project CoVer](#)  
 Research project on “Constraint-based Verification of reactive systems”, funded by “MIUR - Ministero dell’Istruzione, dell’Università e della Ricerca”  
<https://person.dibris.unige.it/delzanno-giorgio/cover>

## SUPERVISION OF RESEARCH

---

- 2017 - 2020 [Supervisor, with Anca Muscholl, of the PhD thesis of Sougata Bose](#)  
 Bordeaux University, France
- 2018 - 2019 [Supervisor, with Diego Figueira, of the postdoc of Emilia Maria Descotte](#)  
 LaBRI “Laboratoire Bordelais de Recherche en Informatique”, Bordeaux, France
- 2017 - 2017 [Supervisor of the research internships of David Barozzini and Alberto Molinari](#)  
 LaBRI “Laboratoire Bordelais de Recherche en Informatique”, Bordeaux, France

- 2016 - 2017 Supervisor of the research internship of Paul Gallot  
LaBRI "Laboratoire Bordelais de Recherche en Informatique", Bordeaux, France
- 2014 - 2017 Supervisor, with Anca Muscholl and Olivier Gauwin, of the PhD thesis of F elix Baschenis  
Bordeaux University, France
- 2012 - 2012 Supervisor of the postdoc of Amaldev Manuel  
LaBRI "Laboratoire Bordelais de Recherche en Informatique", Bordeaux, France
- 2004 - 2006 Supervisor, with Angelo Montanari, of the PhD thesis of Davide Bresolin  
Udine University, Italy

## TEACHING ACTIVITY

---

- 2022 - 2023 Lectures on "Introduction to Distributed Systems" (14 hours) Bachelor's degrees in Computer Science and Mathematics, Udine University, Italy
- 2022 - 2023 Lectures on "Distributed Systems" (48 hours) Master's degrees in Computer Science, Udine University, Italy
- 2022 - 2023 Laboratory of "Algorithms and Data Structures" (36 hours) Bachelor's degrees in Computer Science, Udine University, Italy
- 2022 - 2023 Lectures on "Verification and Validation techniques in AI and Cybersecurity" (36 hours) Master's degrees in Computer Science, Udine University, Italy
- 2021 - 2022 Lectures on "Distributed Systems" (24 hours) Master's degrees in Computer Science, Udine University, Italy
- 2021 - 2022 Laboratory of "Algorithms and Data Structures" (24 hours) Bachelor's degrees in Computer Science, Udine University, Italy
- 2021 - 2022 Lectures on "Verification and Validation techniques in AI and Cybersecurity" (24 hours) Master's degrees in Computer Science, Udine University, Italy
- 2020 - 2021 Lectures on "Distributed Systems" (24 hours) Master's degrees in Computer Science, Udine University, Italy
- 2020 - 2021 Laboratory of "Algorithms and Data Structures" (24 hours) Bachelor's degrees in Computer Science, Udine University, Italy
- 2020 - 2021 Lectures on "Verification and Validation techniques in AI and Cybersecurity" (24 hours) Master's degrees in Computer Science, Udine University, Italy
- 2019 - 2020 Lectures on "Distributed Systems" (24 hours) Master's degrees in Computer Science, Udine University, Italy
- 2019 - 2020 Laboratory of "Algorithms and Data Structures" (24 hours) Bachelor's degrees in Computer Science, Udine University, Italy
- 2019 - 2020 Lectures on "Automatic verification of systems: theory and applications" (24 hours) Master's degrees in Computer Science, Udine University, Italy



- 2014 - 2015 Tutorials on “Automata and Complexity” (24 hours) Bachelor’s degrees in Mathematics and Computer Science, University of Bordeaux, France
- 2013 - 2014 Tutorials on “Automata and Complexity” (24 hours) Bachelor’s degrees in Mathematics and Computer Science, University of Bordeaux, France
- 2008 - 2009 Lectures on “Computer Science II” (32 hours) Bachelor’s degree in Mathematics, Udine University, Italy
- 2007 - 2008 Lectures on “Computer Science and Archiving” (30 hours) Bachelor’s degree in Medical Radiology Techniques for Imaging and Radiotherapy, Udine University, Italy
- 2007 - 2008 Lectures on “Advanced Databases” (24 hours) Bachelor’s degree in Computer Science, Udine University, Italy
- 2006 - 2007 Lectures on “Model Checking” (16 hours) Master’s degree in Computer Science, Udine University, Italy
- 2006 - 2007 Lectures on “Advanced Databases” (25 hours) Bachelor’s degree in Computer Science, Udine University, Italy
- 2005 - 2006 Laboratory of “Computer Architecture” (25 hours) Bachelor’s degree in Computer Science, Udine University, Italy
- 2005 - 2006 Laboratory of “Algorithms and Data Structures” (25 hours) Bachelor’s degree in Computer Science, Udine University, Italy
- 2005 - 2006 Lectures on “Advanced Databases” (20 hours) Bachelor’s degree in Computer Science, Udine University, Italy
- 2004 - 2005 Lectures on “Advanced Databases” (20 hours) Bachelor’s degree in Computer Science, Udine University, Italy
- 2003 - 2004 Lectures on “Computer Science II” (30 hours) Bachelor’s degree in Mathematics, Udine University, Italy

## PUBLICATIONS SUMMARY

---

I have published a total of

33 conference papers

15 journal papers

1 books

1 editorships

Further details can be found at my homepage: <http://users.dimi.uniud.it/gabriele.puppis>