

Curriculum Vitae

Dr. Margherita Zorzi, Ph.D

April 17, 2024

Attività didattica, di servizio, di ricerca (con elenco pubblicazioni) e titoli della Candidata Margherita Zorzi, presentati attraverso Curriculum redatto in forma di dichiarazione sostitutiva di certificazione o di atto di notorietà (artt. 46 e 47 del D.P.R. 445/2000). La sottoscritta, consapevole che – ai sensi dell’art. 76 del D.P.R. 445/2000 – le dichiarazioni mendaci, la falsità negli atti e l’uso di atti falsi sono puniti ai sensi del codice penale e delle leggi speciali, dichiara che le informazioni rispondono a verità.

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1 General Informations

1.1 Studies

- 2000/2005: Master Degree in Computer Science (20th July 2005), magna cum laude, University of Verona.
- 2006/2008 Ph.D in Computer Science (14th May 2009), University of Verona.
Ph.D Thesis: *Lambda Calculi and Logics for Quantum Computing*.
Advisors: Prof. Andrea Masini.
Referees : Proff.ssa Simonetta Ronchi della Rocca. Department of Computer Science, University of Torino; Prof. Peter Selinger, Department of Mathematics and Statistics, Dalhousie University.

1.2 Positions

- From 1/9/2021: Temporary Assistant Professor (Ricercatrice a Tempo Determinato di tipo B (RTDB)), SSD MAT/01 (Logic and complementary mathematics).
- From 1/4/2018 to 31/8/2021: Temporary Assistant Professor (Ricercatrice a Tempo Determinato di tipo A (RTDA)), SSD INF/01 (Computer Science).
- From 1/10/2011 to 30/9/2012 Post-doctoral researcher at *LIPN (Laboratoire d'Informatique Paris Nord) dell'Università Parigi Nord (Paris 13)*. Project COMPLICE (Implicit Computational Complexity, Concurrency and Extraction) project, ref.: ANR-08-BLANC-0211-01.
- **Other Post-Doc Positions at University of Verona** From 1/2/2016 to 31/1/2018 (project: Logics and Algorithms and Natural Language Processing for XML and clinical databases). From 1/2/2015 to 31/1/2016 (project: Computational Thinking and Didactics of Computer Science). From 1/10/2012 to 30/9/2014 (project: QUASAR: QUantum lAnguages, logicS And inteRaction). From 1/1/2009 to 30/9/2011 (project: Logics and Calculi for Quantum Computing)¹.

1.3 National and International Scientific Qualifications

- Since 6/4/2018: ASN (Abilitazione Scientifica Nazionale) “Settore concorsuale” 01/A1, SSD. MAT/01 “Logica Matematica e Matematiche Complementari”, seconda fascia

¹ “ai sensi dell’art. 51, comma 6, legge 27/12/1997”

Professore Associato (Mathematical Logic and Complementary Mathematics, second level, Associate Professor), valid until 6/04/2029.

- Since 6/4/2018: ASN (Abitolazione Scientifica Nazionale) “Settore concorsuale” 01/B1, SSD INF/01 Informatica, “seconda fascia Professore Associato” (Computer Science, second level, Associate Professor), valid until 29/04/2032.
- Since 1/2/2013 (and renewed in 2018): “Maître de Conférence”, Ministère de l’Enseignement Supérieur et de la Recherche Française: nr. 18227244217, valid until 31/12/2022.

1.4 Membership to Councils and Committees at University of Verona

- Consiglio del Dipartimento di Informatica.
- Collegio Docenti Dottorato in Matematica Trento-Verona.
- Collegio Didattico di Matematica e Data Science.
- Collegio Didattico di Informatica.
- Commissione Paritetica Docenti-Studenti (since 2023).
- Collegio Didattico Biotecnologie (until A.A. 22/23).
- Collegio Docenti Dottorato in Informatica (until 2021).

2 Publications

Journal Papers

1. [MMZ24] S. Martini, A. Masini, M. Zorzi. A natural deduction calculus for S4.2, acceptor for publication in Notre Dame Journal of Formal Logic, 2024.
2. [MMZ23] S. Martini, A. Masini, M. Zorzi. Cut elimination theorem for extended modal 2-sequents, Bulletin of the Section of Logic Volume 52/4 (2023), pp. 459–495, <https://doi.org/10.18778/0138-0680.2023.22>.
3. [GMZ23] S. Guerrini, A. Masini, M. Zorzi. Natural deduction calculi for classical and intuitionistic S5, Journal of Applied Non-Classical Logics, Volume 33 - Issue 2, pp. 165-205, 2023.
4. [MMZ20] S. Martini, A. Masini, M. Zorzi, From 2-Sequents and Linear Nested Sequents to Natural Deduction for Normal Modal Logics, ACM Trans. Comput. Log. 22(3): 19:1-19:29 (2021), DOI <https://doi.org/10.1145/3461661>.
5. [MZ19] M. Zorzi. Quantum Calculi. From Theory to Language Design. Applied Sciences, 9(24), art.number, 5472; pp 1–19, 2019. ISSN 2076-3417, DOI <https://doi.org/10.3390/app9245472>.
6. [MZ18] A. Masini, M. Zorzi. A logic for quantum register measurements, Axioms, 8 (1), 25, pp.1–10, 2019. ISSN 2075-1680, DOI <https://doi.org/10.3390/axioms8010025>.
7. [PPZ19] L. Paolini, M. Piccolo, M. Zorzi. qPCF: higher-order languages and quantum circuits, Journal of Automated Reasoning 63(4), pp. 941-966, Springer, 2019. Print ISSN 0168-7433, Online ISSN 1573-0670, DOI <https://doi.org/10.1007/s10817-019-09518-y>.
8. [COTVZ19] M. Cristani, F. Olivieri, C. Tomazzoli, L. Viganò, M. Zorzi, Diagnostics as a Hybrid Reasoning Processes: from Logic Model to Software design, Journal of Computing and Information Technology 27, pp. 43-57, 2019. ISSN 1330-1136, DOI 10.20532/cit.2019.1004411
9. [CMPAM19] C. Combi, M. Zorzi, G. Pozzani, E. Arzenton, U. Moretti, Normalizing Spontaneous Reports into MedDRA: some experiments with the NLP software

MagiCoder, IEEE Journal of Biomedical and Health Informatics, 23(1): 95-102, 2019.

Print ISSN 2168-2194, Electronic ISSN: 2168-2208, DOI 10.1109/JBHI.2018.2861213.

10. [CMPAM18] C. Combi, M. Zorzi, G. Pozzani, E. Arzenton, U. Moretti, From narrative descriptions to MedDRA: automagically encoding adverse drug reactions, *Journal of Biomedical Informatics*, Volume 84, pp. 184-199, 2018.
ISSN 1532-0464, DOI 10.1016/j.jbi.2018.07.001.
11. [CMOZ18] C. Combi, A. Masini, B. Oliboni, M. Zorzi, A Hybrid Logic for XML Reference constraints, *Data & Knowledge Engineering*, Volume 115, pp. 94-115, 2018.
ISSN: 0169-023X, DOI <https://doi.org/10.1016/j.datak.2018.02.005>.
12. [VVZ17] M. Volpe, L. Viganò, M. Zorzi, A branching distributed temporal logic for reasoning about entanglement-free quantum state transformations.
Information & Computation, Volume 255, Part 2, pp 311-333, 2017.
ISSN 0890-5401, DOI: 10.1016/j.ic.2017.01.007
13. [AZ16] F. Aschieri, M. Zorzi, On natural deduction in classical first-order logic: Curry-Howard correspondence, strong normalization and Herbrand's theorem.
Theoretical Computer Science, Vol. 625, supplement C, pp. 125-146, 2016.
ISSN: 0304-3975, DOI: 10.1016/j.tcs.2016.02.028
14. [MZ16] M. Zorzi, On Quantum Lambda Calculi: a Foundational Perspective.
Mathematical Structures in Computer Science, Volume 26, Issue 7, pp. 1107-1195, Cambridge University Press, 2016.
ISSN: 0960-1295 (Print), 1469-8072 (Online),
DOI: <http://dx.doi.org/10.1017/S0960129514000425>
15. [DLZ12] U. Dal Lago, M. Zorzi, Probabilistic Operational Semantics for the Lambda Calculus.
RAIRO - Theoretical Informatics and Applications, Volume 46, Issue 3, Pages 413-450, 2012.
Published online by Cambridge University Press.
ISSN 0988-3754 (Print), 1290-385X (Online),
DOI: <http://dx.doi.org/10.1051/ita/2012012>.
16. [MVZ11] A. Masini, L. Viganò, M. Zorzi, Modal Deduction Systems for Quantum States Transformations.

Journal of Multiple-Valued Logic and Soft Computing, Volume 17, Issue 5-6, pp 475-519, Old City Publishing, 2011.

ISSN 1542-3980 (print), 1542-3999 (online)

<http://www.oldcitypublishing.com/journals/mvlsc-home/mvlsc-issue-contents/mvlsc-volume-17-number-5-6-2011/mvlsc-17-5-6-p-475-519/>

17. [DLMZ11] U. Dal Lago, A. Masini, M. Zorzi, Confluence Results for A Quantum Lambda Calculus with Measurements. *Electronic Notes in Theoretical Computer Science*, Volume 270, Issue 2, pp. 251-261, Elsevier, 2011.
ISSN 1571-0661, DOI 10.1016/j.entcs.2011.01.035
18. [DLMZ10] U. Dal Lago, A. Masini, M. Zorzi, Quantum Implicit Computational Complexity. *Theoretical Computer Science*, Volume 411, Issue 2, pp 377-409, Elsevier, 2010.
ISSN 0304-3975, DOI 10.1016/j.tcs.2009.07.045
19. [DLMZ09] U. Dal Lago, A. Masini, M. Zorzi, On a Measurement Free Quantum Lambda Calculus with Classical Control. *Mathematical Structures in Computer Science*, Volume 19, Issue 02, pp 297-335, Cambridge University Press, UK, 2009.
ISSN 0960-1295 (Print), 1469-8072 (Online), DOI 10.1017/S096012950800741X

Conference Papers

1. [CDTZ19] M. Cristani, F. Domenichini, C. Tomazzoli, M. Zorzi. It could be worse, it could be raining: reliable automatic meteorological forecasting for holiday planning, *Proceedings of Advances and Trends in Artificial Intelligence. From Theory to Practice- 32nd International Conference on Industrial, Engineering and Other Applications of Applied Intelligent Systems*, IEA/AIE 2019, Graz, Austria, July 9-11, 2019, Lecture Notes in Computer Science 11606, 3-11, 2019, Springer.
ISSN 0302-9743, ISBN 978-3-030-22998-6 (print), 978-3-030-22999-3 (online), DOI https://doi.org/10.1007/978-3-030-22999-3_1
2. [CTZ19] M. Cristani, C. Tomazzoli, M. Zorzi. Automatic Generation of Dictionaries: the journalistic lexicon case, *Proceedings of Advances and Trends in Artificial Intelligence. From Theory to Practice- 32nd International Conference on Industrial, Engineering and Other Applications of Applied Intelligent*

Systems, IEA/AIE 2019, Graz, Austria, July 9-11, 2019, Lecture Notes in Computer Science 11606, 744-752, 2019, Springer.
 ISSN 0302-9743, ISBN 978-3-030-22998-6 (print), 978-3-030-22999-3 (online),
https://doi.org/10.1007/978-3-030-22999-3_63

3. [COOTZ19] M. Cristani, F. Olivieri, L. Olivieri, C. Tomazzoli and M. Zorzi. Web literature, authorship attribution and editorial workflow ontologies, *Proceedings of KES-AMSTA 2018*, Smart Innovation, Systems and Technologies 148, 2019. Springer. ISBN 978-981-13-8678-7 (print), 978-981-13-8679-4 (online), DOI https://doi.org/10.1007/978-981-13-8679-4_11

4. [PRZ19] L. Paolini, L. Roversi, M. Zorzi Quantum Programming Made Easy, *Proceedings Joint International Workshop on Linearity and Trends in Linear Logic and Applications*, FLOC Conference, Oxford, 7-8 July, 2018, *Electronic Proceedings in Theoretical Computer Science (EPTCS)* 292, 2019, pp. 133-147, OPA.
 ISSN 2075-2180, DOI 10.4204/EPTCS.292.8

5. [CDOTZ18] M. Cristani, F. Domenichini, F. Olivieri, C. Tomazzoli, and M. Zorzi. It could rain: weather forecasting as a Reasoning Process, *Proceedings of 22nd International Conference on Knowledge-Based and Intelligent Information & Engineering Systems-KES 2018*, Belgrado, 3-5 September 2018, *Procedia Computer Science* 126, pp. 850-859, Elsevier.
 ISSN 1877-0509, DOI <https://doi.org/10.1016/j.procs.2018.08.019>

6. [CCTZ18] M. Cristani, I. Chitó, C. Tomazzoli, and M. Zorzi. A simple algorithm for the lexical classification of comparable adjectives, accepted, *Proceedings of 22nd International Conference on Knowledge-Based and Intelligent Information & Engineering Systems-KES 2018*, Belgrado, 3-5 september, 2018 *Procedia Computer Science* 126, pp. 626-635, Elsevier.
 ISSN 1877-0509, DOI <https://doi.org/10.1016/j.procs.2018.07.297>.

7. [CCPTZ18] M. Cristani, M. Cristani, A. Pesarin, C. Tomazzoli, and M. Zorzi. Making sentiment analysis algorithms scalable, *Proceedings of 4th International Workshop on Knowledge Discovery on the Web KDWEB 2018*, Caceres, Spain, june 5th 2018, *Current Trends in Web Engineering - ICWE 2018 International Workshops*, Lecture Notes in Computer Science, 11153, Springer, 2018.
 ISSN 0302-9743, ISBN 978-3-030-03055-1 (print), 978-3-030-03056-8 (online),
 DOI https://doi.org/10.1007/978-3-030-03056-8_12

8. [COTZ18] M. Cristani, F. Olivieri, C. Tomazzoli, and M. Zorzi. Towards a Logical Framework for Diagnostic Reasoning.
Proceedings of KES International Symposium on Agent and Multi-Agent Systems: Technologies and Applications (KES-AMSTA) 2018, Smart Innovation, Systems and Technologies Volume 96, pp. 144-155, 2018, Springer.
ISBN 978-3-319-92030-6 (print), 978-3-319-92031-3 (online),
DOI https://doi.org/10.1007/978-3-319-92031-3_14

9. [ZCPM17] M. Zorzi, C. Combi, G. Pozzani, U. Moretti. Mapping Free Text into MedDRA by Natural Language Processing: a Modular Approach in Designing and Evaluating Software Extensions.
Proceedings of 8th ACM Conference on Bioinformatics, Computational Biology, and Health Informatics (ACM-BCB 17), BCB 17, pp. 27-35, ACM New York, 2017.
ISBN 978-1-4503-4722-8
DOI:10.1145/3107411.3107431

10. [PSBBRZ17] Margherita Pasini, Ugo Solitro, Margherita Brondino, Roberto Burro, Daniela Raccanello, Margherita Zorzi, Psychology of programming: the role of creativity, empathy and systemizing.
Proceedings of 7th International Conference in Methodologies and intelligent Systems for Technology Enhanced Learning (MIS4TEL'17), University of Porto, June 21-23, 2017, Advances in Intelligent Systems and Computing, Volume 617, pp. 82-89, Springer, 2017.
ISBN: 978-3-319-60819-8
ISSN: 21945357
DOI: 10.1007/978-3-319-60819-8_10

11. [ZCPAM17] M. Zorzi, C. Combi, G. Pozzani, E. Arzenton, U. Moretti, A Co-occurrence Based MedDRA Lexicon: some Preliminary Results.
16th Conference on Artificial Intelligence In Medicine (AIME 17), Vienna, june 21-24, Lecture Notes in Computer Science, 10259, pp. 215-220, Springer, 2017.
ISBN 978-3-319-59758-4
DOI 10.1007/978-3-319-59758-4_24

12. [PZ17] L. Paolini, M. Zorzi, qPCF: a Language for Quantum Circuit Computations, in proceedings of Theory and Applications of Models of Computation 14th Annual Conference, TAMC 2017, Bern, Switzerland, April 20-22, 2017, Lecture Notes in Computer Science 10185, pp. 455-469, Springer, 2017.
ISBN: 978-3-319-55911-7

ISSN: 03029743

DOI: 10.1007/978-3-319-55911-7_33

13. [SZPB17] U. Solitro, M. Zorzi, M. Pasini, M. Brondino, Early training in programming: from high school to college. Proceedings of 2nd EAI International Conference on Smart Objects and Technologies for Social Good, GOODTECHS 2016, Venice, Italy, 30 November -1 December 2016, GoodTechs 2016, Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, LNICST 195, pp. 325-332, Springer Verlag, 2017.
ISBN 978-3-319-61948-4
Online ISBN 978-3-319-61949-1
DOI: 10.1007/978-3-319-61949-1_34.
14. [SZPB16] U. Solitro, M. Zorzi, M. Pasini, M. Brondino, A “light” application of Blended Extreme Apprenticeship in teaching Programming to Students of Mathematics, Proceedings of 6th International Conference in Methodologies and intelligent Systems for Technology Enhanced Learning (MIS4TEL’16), University of Sevilla, Sevilla (Spain) ,1st-3rd June. Advances in Intelligent Systems and Computing 478, pp. 73-80.
ISSN: 2194-5357
ISBN: 978-331940164-5
DOI: 10.1007/978-3-319-40165-2_8
15. [CLMPZ15] C. Combi, R. Lora, U. Moretti, M. Pagliarini, M. Zorzi, Automagically Encoding Adverse Drug Reactions in MedDRA, IEEE International Conference on Healthcare Informatics 2015 (ICHI 2015), Dallas, TX, USA, 21-24 October, Article number 7349679, pages 90-99, published by Institute of Electrical and Electronics Engineers Inc., 2015.
ISBN: 978-146739548-9 (NV)
DOI: 10.1109/ICHI.2015.18
16. [CMOZ15] C. Combi, A. Masini, B. Oliboni, M.Zorzi. A Logical Framework for XML Reference Specification.
Proceedings di ”26th International Conference on Database and Expert Systems Applications - DEXA 2015” , Valencia (Spain), 1-4 september 2015, Lecture Notes in Computer Science 9262, pp. 258-267, Springer Verlag Germany, 2015.
ISBN 978-3-319-22852-5
DOI 10.1007/978-3-319-22852-5_22
17. [DZ15] U. Dal Lago, M. Zorzi, Wave-style Token Machine and Quantum Lambda

Calculi.

Post-Proceedings of Third International Workshop on Linearity (LINEARITY 2014) part of VSL-FLoC'14, Vienna, Austria, 13th July, 2014, Electronic Proceedings in Theoretical Computer Science 176, pp. 64-78, OPA, 2015.

ISSN: 2075-2180

DOI: 10.4204/EPTCS.176

18. [VVZ14] M. Volpe, L. Viganò, M. Zorzi, Quantum State Transformations and Branching Distributed Temporal Logic. In proceedings of *21st International Workshop on Logic, Language, Information and Computation (Wollic'14)*, (U. Kohlenbach, P. Barceló, R. de Queiroz Eds.), Valparaíso, Chile, September 1-4, 2014, Lecture Notes in Computer Science, Vol. 8652, 1–19, Springer, 2014.
ISBN: 978-3-662-44145-9
ISSN: 03029743
DOI: 10.1007/978-3-662-44145-9_1
19. [AZ14] F. Aschieri, M. Zorzi, A “Game Semantical” Intuitionistic Realizability Validating Markov's Principle. *Post-proceedings of 19th International Conference on Types for Proofs and Programs (TYPES 2013)* 22-26 April 2013, Toulouse, France, Leibniz International Proceedings in Informatics (LIPIcs), Vol. 26, Pages 24-44, published by Schloss Dagstuhl - Leibniz-Zentrum fuer Informatik, 2014.
ISBN: 978-3-939897-72-9
ISSN: 1868-8969
DOI: 10.4230/LIPIcs.TYPES.2013.24
20. [AZ13] F. Aschieri, M. Zorzi, Non-Determinism, non-termination and the Strong Normalization of System T.
In proceedings of Typed Lambda Calculi and Applications (TLCA'13), parts of International Conference on Rewriting, Deduction, and Programming, June 23 -28, 2013, Eindhoven (The Netherlands), Lecture Notes in Computer Science LNCS 7941, 31–47. Springer, Heidelberg, 2013.
ISBN: 978-3-642-38946-7
ISSN: 0302-9743
DOI: 10.1007/978-3-642-38946-7_5
21. [AZ12] F. Aschieri, M. Zorzi, Interactive realizability and the elimination of Skolem functions in Peano Arithmetic.
Proceeding of 4th Classical Logic and Computation - (CL&C'12 Icalp 2012), Warwick - England, 8th July, Electronic Proceedings in Theoretical Computer

Science, vol. 97, pp. 1-18, OPA, 2012.
ISSN 2075-2180
DOI 10.4204/EPTCS.97.1

22. [DLMZ10b] U. Dal Lago, S. Martini, M. Zorzi, General Ramified Recurrence is Sound for Polynomial Time.
Proceedings of *International Workshop on Developments in Implicit Computational complexity*, (DICE 2010, part of ETAPS 2010), march 27-28, 2010, Cyprus. Published in Electronic Proceedings in Theoretical Computer Science, editor P. Baillot, Volume 23, pp. 47-62, OPA, 2010.
ISSN 2075-2180
DOI 10.4204/EPTCS.23.4
23. [MVZ08] A. Masini, L. Viganò, M. Zorzi, A Qualitative Modal Representation of Quantum Register Transformations.
Proceedings of *38th IEEE International Symposium on Multiple Valued Logic (ISMVL 2008)*, may 22-24, 2008, Dallas TX, USA, editor Gerhard Dueck, pp 131-137, IEEE Computer Society, 2008.
ISBN 978-0-7695-3155-7
ISSN 0195-623X
DOI 10.1109/ISMVL.2008.36

Manuscripts

1. [TZ20] D. Trotta, M. Zorzi. Compositional theories for embedded languages, draft, 2023. ArXiv (last update): <https://arxiv.org/abs/2006.10604>.

Miscellanea

1. [BSZ15] M. Boscaini, U. Solitro, M. Zorzi, L'insegnamento dell'Informatica e i linguaggi di programmazione, in *E questo tutti chiamano Informatica. L'esperienza del TFA nelle discipline informatiche*, Roma, Sapienza Editrice, pp. 117-128, 2015.
ISBN 978-88-98533-63-3
DOI 10.13133/ 978-88-98533-63-3.

PhD Thesis

MZPhD09 *Lambda Calculi and Logics for Quantum Computing*. Ph.D. Thesis, Computer Science Department, Università degli Studi di Verona, 2009.

3 Teaching Activities

3.1 Post-doc supervisor

From 1/12/2019 to 31/11/2020, supervisor, Dott. Davide Trotta, subject: denotational semantics for quantum languages.

3.2 Teaching activities for the PhD in Computer Science

3.2.1 Teaching activities for PhD in Computer Science, Univeristy of Verona

- Foundations of Quantum Languages, planned in September 2024, 12 hours.
- Type Theory and Programming Languages, September 2020, 12 hours.
- Type Theory and Programming Languages, September 2019, 12 hours.
- Type Theory and Programming Languages, September 2018, 16 hours.

3.2.2 Ph.D Commissions, Referee (“Controrelatore”) of Ph.D Thesis

Referee of Ph.D Thesis

- Title Probabilistic Recursion Theory and Implicit Computational Complexity.
Candidate: Sara Zuppiroli, Alma Mater Studiorum University of Bologna

Member of final Ph.D Commissions

- Titolo Probabilistic Recursion Theory and Implicit Computational Complexity.
Candidata: Sara Zuppiroli, Alma Mater Studiorum University of Bologna, Ciclo XXV, September 2014.

3.3 Teaching (Bachelor and Master’s Degrees) University of Verona

A.A. 2023-2024

- **Logica (Logic)**, Bachelor’s degree in Computer Science, 56 h
- **Logics in AI/Logica in Informatica (Logic in Computer Science)**, Master’s degree in Artificial intelligence/Master’s degree in Computer Science and Engineering, 42 h.
- **Advanced Course in the Foundations of Mathematics**, Master’s degree in Mathematics, 16 h, planned for April/May 2024.
- **Foundations of Quantum Languages**, planned for September 2024, 12 h, PhD in Computer Science.

A.A. 2022-2023

- **Logica (Logic)**, Bachelor's degree in Computer Science, 56 h
- **Advanced Course in the Foundations of Mathematics**, Master's degree in Mathematics, 16 h.
- **Matematica e Statistica-Mod. 1 Matematica (Mathematics)**, Bachelor's degree in Biotechnology, 48 h.

A.A. 2021-2022

- **Algebra Lineare (Linear Algebra)**, Bachelor's degree in Computer Science, 12 h
- **Mathematical Logic**, Master's degree in Mathematics, 48 h.
- **Matematica e Statistica-Mod. 1 Matematica (Mathematics)**, Bachelor's degree in Biotechnology, 48 h.

A.A. 2020-2021, A.A 2019-2020, A.A. 2018-2019

- **Informatica e Produzione Multimediale (Informatics and multimedia production)**, Master's degree in Publishing and Journalism, 24 h.
- **Informatica Documentale (Documental Information Technology)**, Bachelor's degree in Communication Studies, 36 h.

A.A. 2017-2018

- **Teoria dei tipi e linguaggi di programmazione (Type Theory and Programming Languages)**, PhD. program in Computer Science, 16 h, June/July 2018.
- **Informatica Documentale (Documental Information Technology)**, Bachelor's degree in Communication Studies, 36 h.

A.A. 2016-2017

- **Informatica Documentale (Documental Information Technology)**, Bachelor's degree in Communication Studies, 36 h.

A.A. 2015-2016

- **Informatica Documentale (Documental Information Technology)**, Bachelor's degree in Communication Studies, 36 h.

A.A. 2014-2015

- **Sistemi informativi e sicurezza–Modulo fondamentali**, TFA A042 - Informatica (II level), 12 h.
- **Informatica Documentale (Documental Information Technology)**, Bachelor's degree in Communication Studies, 36 h.

A.A. 2013-2014

- **Informatica Documentale (Documental Information Technology)**, Bachelor's degree in Communication Studies, 36 h.

A.A. 2010-2011

- **Algoritmi-MOD. Algoritmi (Algorithms)** Master's degree in Computer Science and Engineering, 48 h.
- **Algoritmi-MOD. Complessità (Complexity)** Master's degree in Computer Science and Engineering, 48 h.
- **Informatica Documentale (Documental Information Technology)**, Bachelor's degree in Communication Studies, 36 h.
- **Informatica di Base (Basic Information Technology)**, Bachelor's degree in Communication Studies, 36 h.

A.A. 2009-2010

- **Informatica Documentale (Documental Information Technology)**, Degree in Communication Science: publishing and journalism, 40 h.
- **Informatica di Base (Basic Information Technology)** Bachelor's degree in Communication Studies, 36 h.
- **Informatica e Statistica (MOD. Informatica) (Computer science and statistics)** Bachelor's degree in Viticultural and Oenological Science and Technology, 24 h.

3.4 Advisor and referee of Degree Thesis, University of Verona

3.4.1 Advisor

- A.A. 2023/24 A.A. Advisor of a Master degree Thesis, LM in Mathematics. Student: Davide Santacroce. Thesis (defended on 11/3/24): Bridges between Algebra and Logic: the case of Intuitionism.
- A.A. 2021/22 Advisor of a Master degree Thesis, LM in Mathematics. Student: Guido Vencato. Thesis (defended on 9/3/22): Intuitionistic Labelled Systems and Beth's models: some investigations.

Other experiences

From 2011 to 2021: advisor of 14 bachelor degree thesis and 2 master's degree thesis, Bachelor's degree in Communication Studies and Master's Degree in Master's degree in Publishing and Journalism.

3.4.2 Co-advisor activities

- Title: *Calcolo Quantistico*. Candidate: Matteo Busti. Laurea in Informatica, Università di Verona, A.A. 2007-2008. Advisor Prof. Andrea Masini.
- Title Elementi per una Semiotica Videoludica: ipertesti, interlocutori e mondi possibili. Candidate: Eleonora Mazza Pallone. Master Degree in Editoria e Giornalismo, Università di Verona, A.A. 2014/15. Advisor Prof. Umberto Castellani.

3.5 Teaching activities at foreign universities

- Cycle of lessons “ λ -calculi for Quantum Computing”, for Ph.D students and researcher, “Laboratoire d’Informatique Paris-Nord” (LIPN), Université Paris 13, during my position 2011-2012 as post-doc researcher.

4 National and International Talks

- February 9th 2023, *Compositional Theories for Host-Core Languages*, invited seminar, Department of Computer Science, University of Torino.
- September 6th 2023, *Modalità, conoscenza e teoria della dimostrazione*, special session “Matematica per l’Intelligenza Artificiale e il Machine Learning” in XXII CONGRESSO DELL’ UNIONE MATEMATICA ITALIANA invited seminar, Pisa.
- November 17th 2023, *Extensional Proof-Systems for Modal Logics* (on line), in Oberwolfach Workshop Mathematical Logic: Proof Theory, Constructive Mathematics, invited seminar.
- 20th August 2020, *Host-Core Programming Theory*, invited speaker, Instituto de Ciencias de la Computación Facultad de Ciencias Exactas y Naturales Universidad de Buenos Aires (online).
- 30th June 2020, *Host-Core Programming Theory*, invited speaker, “International Workshop on Confluence”, Paris Nord Summer of LoVe 2020 (online).
- 10th July 2019, *It could be worse, it could be raining: reliable automatic meteorological forecasting for holiday planning*, 32nd International Conference on Industrial, Engineering and Other Applications of Applied Intelligent Systems, IEA/AIE 2019, Graz, Austria, July 9-11, 2019.
- 10th July 2019, *Automatic Generation of Dictionaries: the journalistic lexicon case*, 32nd International Conference on Industrial, Engineering and Other Applications of Applied Intelligent Systems, IEA/AIE 2019, Graz, Austria, July 9-11, 2019.
- 19th September 2018, *Quantum calculi: from theory to language design*, invited speaker, Dagstuhl Seminar 18381 - Quantum Programming Languages, Schloss Dagstuhl, Wadern, Germany.
- 8th November 2017, *Programming Quantum Computers: Functional Languages and New Perspectives*. 1st Workshop on Quantum Techniques in Machine Learning - QTML 2017, Department of Computer Science, University of Verona, Italy.
- 23th June 2017, *A co-occurrence based MedDRA terminology generation: some preliminary results*, 16th Conference on Artificial Intelligence in Medicine (AIME’17), Vienna, Austria.
- 22th April 2017, *qPCF: a language for quantum circuit computation*, Theory and Applications of Models of Computation (TAMC’17), Bern, CH.

- 3rd September 2015, *A Logical Framework for XML Reference Specification*, 26th International Conference on Database and Expert Systems Applications (DEXA'15), Valencia, Spain.
- 13th July 2014, *Wave-style Token Machine and Quantum Lambda Calculi*, LINEARITY'14, Vienna Summer of Logic, Vienna, Austria.
- 16th February 2012, *An introduction to quantum complexity classes and quantum ICC*, INRIA-PPS Université Paris 7, invited seminar.
- 1 dicembre 2011, *A probabilistic operational semantics for the lambda calculus (and some considerations about probabilistic ICC)*. Université Paris Nord (Paris 13), Dipartimento di Informatica LIPN, COMPLICE Project annual meeting.
- 24th October 2011, *Quantum complexity classes and quantum ICC*, Université Paris Nord (Paris 13), Department of Computer Science LIPN, department seminar.
- 7th February 2011, *Quantum Lambda Calculi*, Université Paris Nord (Paris 13), Department of Computer Science LIPN, invited seminar.
- 1st December 2008, *Modal Deduction Systems for Quantum State Transformation*, Trends in Logics VI, Studia Logica International Conference, University Foundation, Bruxelles, Belgium.

4.1 Other Activites

- 26th June 2020, *Host-Core Programming Theory*, invited speaker, seminars “Logica e Informatica Teorica di Roma 3”, University Roma 3, (online).
- 28th May 2020, *Compositional theories for embedded programming*. “Logic Seminar Verona”, University of Verona, Department of Computer Science.
- 3rd December 2018, *A logic for quantum register measurements*. “Logic Seminar Verona”, University of Verona, Department of Computer Science.
- 9th December 2015, *On quantum lambda calculi: a foundational perspective*. “Logic Seminar Verona”, University of Verona, Department of Computer Science.
- 16th May 2014, *Quantum Computing, Linear Logic and Lambda Calculi*, University of Roma 3, invited lesson.
- 30th January 2014. *Quantum Turing Machines*, University of Torino, Dipartimento di Informatica, invited lesson.
- 11th July 2013, *Wave-style Token Machine and Quantum Lambda Calculi*, University of Torino, Department of Computer Science, invited seminar.

- 6th December 2011, *Lambda Calculi for Quantum Computing*, lesson-seminar, University of Verona.
- 9th June 2010, “Lambda Calcolo Probabilistico”, final meeting CONCERTO, University of Torino.
- 16th MArch 2010, *Un viaggio dentro ICC*, University of Verona, Department seminar.
- 18th February 2009, Lesson *Lambda Calculi and Logics for Quantum Computing*, meeting of CONCERTO, University of Bologna.
- 27th June 2007, *Q-Calcolo: un lambda calcolo quantistico*, University of Verona, Department seminar.
- 28 settembre 2006, *A Quantum Lambda Calculus, Lambda Calculi and Logics for Quantum Computing* Torino, Department of Computer Science, Invited Seminar.

5 Participation to scientific groups activities and national and international research projects

- Member of UMI, Unione Matematica Italiana.
- Member of INdAM-GNSAGA, Istituto Nazionale di Alta Mathematica.
- Member of AILA, Associazione Italiana di Logica e sue Applicazioni.
- From 17/3/23 to 17/3/24 coordinator of the Project “Computazione, Infinito e Reversibilità”, funded by INdAM. Members: Peter Schuster, Giulio Fellin, Margherita Zorzi (University of Verona), Luca Roversi, Luca Paolini (University of Torino).
- LINTEL (Linear Techniques For The Analysis Of Languages): funded by Compagnia di San Paolo (peer-reviewed by European Science Foundation). Luca Paolini (Principal Investigator). Members: Felice Cardone, Erika de Benedetti, Mauro Piccolo, Simona Ronchi Della Rocca, Luca Roversi e Margherita Zorzi, 2013-2015.
- COMPLICE (Implicit Computational Complexity, Concurrency and Extraction): project, ref.: ANR-08-BLANC-0211-01, member and fellowships, Laboratoire d’Informatique LIPN, Université Paris Nord from 1/10/2011 to 30/9/2012.
- CONCERTO (CONtrollo e CERTificazione dell’uso delle risorse) 2008-2010, funded by “Progetti di Rilevanza Nazionale (PRIN) 2007”, Ministero dell’Istruzione, Università e Ricerca (MIUR).
- COFIN04 : FOLLIA project (FONDazioni Logiche di LInguaggi Astratti di Programmazione) 2005-2007, founded by “Progetti di Rilevanza Nazionale (PRIN) 2004”, Ministero dell’Istruzione, Università e Ricerca (MIUR).

6 Editorial Activities

6.1 Journal Guest Editor

- Guest Editor of Special Issue - Quantum Logics and Quantum Measurements, in Applied Science
https://www.mdpi.com/journal/applsci/special_issues/Quantum_Logics.

6.2 Program and scientific Committee Membership

- Member of scientific committee of The Sixteenth Biennial IQSA Conference Quantum Structures 2024, <https://clea.research.vub.be/iqsa-2024>.
- PC Member of 18th International Conference on Quantum Physics and Logic, 2024.
<https://qpl2024.dc.uba.ar>
- PC Member of 4th International Workshop on Programming Languages for Quantum Computing (PLanQC), 2024.
- PC Member of 19th International Conference on Quantum Physics and Logic, 2022.
<https://qpl2022.eu>
- PC Member of 18th International Conference on Quantum Physics and Logic, 2021.
<https://qpl2021.eu>
- PC Member of 2nd International Workshop on Programming Languages for Quantum Computing (PLanQC), 2021.
- PC Member of 17th International Conference on Quantum Physics and Logic Université Paris Saclay Paris, France, June 1-5, 2020.
<https://www.monoidal.net/paris2020/qpl/>
- PC member of International Workshop on Developments in Implicit Computational complExity and Foundational and Practical Aspects of Resource Analysis DICE-FOPARA 2019, Praga, April 6th-7th, 2019.
<https://conf.researchr.org/track/etaps-2019/dice-fopara-2019-papers>
- PC member of 16th International Conference on Quantum Physics and Logic QPL 2019, Chapman University Orange, California United States June 10-14, 2019.
<https://qpl2019.org>
- PC Member 5th International Workshop on Knowledge Discovery on the Web KD-WEB 2019, Hosted by ICWE 2019.
- PC Member 15th International Conference on Quantum Physics and Logic QPL 2018, Halifax, Canada June 3-7, 2018.
<https://www.mathstat.dal.ca/qpl2018/>

6.3 Referee for International Journals

- The review of symbolic logic.
- LMCS- Logical Methods in Computer Science.
- ACM Transactions on Computational Logic, ACM.
- Theoretical Computer Science, Elsevier.
- Journal of Applied Logic, Elsevier.
- Mathematical Structures in Computer Science, Cambridge University Press.
- Artificial Intelligence in Medicine, Elsevier.

6.4 Referee for International Conferences / Workshop

- CSL- Computer Science Logic.
- TLCA- International Conference on Typed Lambda Calculi and Applications.
- MFCS-International Symposium on Mathematical Foundation of Computer Science.
- DCM- International Workshop on Developments in Computational Models.
- LSFA- Workshop on Logical and Semantic Frameworks with applications.
- ICALP- International Colloquium on Automata, Languages and Programming.
- LICS- Symposium on Logic in Computer Science.
- FoSSaCS-International Conference on Foundations of Software Science and Computation Structures.

7 Other skills

7.1 Linguistic Skills

- **English** medium/good.
- **French** basic.

Faithfully, Margherita Zorzi