Gianluca Curzi

Curriculum Vitae

Personal profile

- **First name**: Gianluca
- **Last name**: Curzi
- **Address**: 16 Stensprängaregatan, Gothenburg, 426 68, Sweden
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Education and career

from 01/25 **Researcher**.
- Institution: Faculty of Humanities, University of Gothenburg, Sweden
- Description: I am funded by my four-year VR grant *Proofs with Cycles in Computation*

09/23 - present **Postdoctoral researcher**.
- Institution: Faculty of Humanities, University of Gothenburg, Sweden
- Supervisor: Graham Leigh

10/20 - 08/23 **Postdoctoral researcher**.
- Institution: School of Computer Science, University of Birmingham, UK
- Supervisor: Anupam Das

09/16 - 06/20 **PhD in Computer Science in joint thesis with Paris Diderot University**.
- Institution: Department of Computer Science, University of Turin, Italy
- Supervisor: Luca Roversi (University of Turin)
- Co-supervisor: Michele Pagani (Paris Diderot University)
- PhD Thesis: *Non-Laziness in Implicit Computational Complexity and Probabilistic λ-calculus*. http://gianlucacurzi.com/main.pdf
- Final Defence: 12/06/2020
- Reviewers: Ugo Dal Lago (University of Bologna) and Alessio Guglielmi (University of Bath)
- Jury: Patrick Baillot (CNRS, ENS Lyon), Ugo Dal Lago (University of Bologna), Claudia Faggian (CNRS, Paris Diderot University), Alessio Guglielmi (University of Bath), Michele Pagani (Paris Diderot University), Luca Roversi (University of Turin), Lorenzo Tortora De Falco (Roma Tre University).

10/13 - 04/16 **Master Degree in Philosophy**.
- Institution: Faculty of Philosophy, University of Florence, Italy
- Final Mark: 110/110 summa cum laude

09/10 - 10/13 **Bachelor's Degree in Philosophy**.
- Institution: Faculty of Philosophy, University of Urbino, Italy
- Final Mark: 110/110 summa cum laude

Other courses attended

05/17 *Alternative Computing Paradigms*, University of Turin, Italy

01/17 - 04/17 *Proofs and Programs: classical tools*, *Master in Mathematical Logic and Foundations of Computer Science* (LMFI), University of Paris Diderot, France

01/17 - 04/17 *Computational Content of Proofs in Classical Logic*, *Master in Mathematical Logic and Foundations of Computer Science* (LMFI), Paris Diderot University, France

01/17 - 04/17 *Logics and Languages for Complexity*, *Master in Mathematical Logic and Foundations of Computer Science* (LMFI), Paris Diderot University, France

01/17 - 04/17 *Logics and Languages for Complexity*, *Master in Mathematical Logic and Foundations of Computer Science* (LMFI), Paris Diderot University, France

12/16 *Programming 1*, University of Turin, Italy

Papers

Journal Papers

2024 Alessandro Aldini, Gianluca Curzi, Pierluigi Graziani, Mirko Tagliaferri. A probabilistic modal logic for context-aware trust based on evidence. *International Journal of Approximate Reasoning*. https://www.sciencedirect.com/science/article/pii/S0888613X24000549

2020   Gianluca Curzi. Linear Additives. EPTCS *Electronic Proceedings in Theoretical Computer Science*. https://cgi.cse.unsw.edu.au/~eptcs/paper.cgi?TLLALINEARITY2020.4.pdf

2020   Curzi Gianluca, Luca Roversi. A type-assignment of linear erasure and duplication. TCS (*Theoretical Computer Science*). https://doi.org/10.1016/j.tcs.2020.05.001

Conference Proceedings

2024   Matteo Acclavio, Gianluca Curzi, Giulio Guerrieri. Infinitary cut-elimination via finite approximations. CSL (*Computer Science Logic*). https://doi.org/10.4230/LIPIcs.CSL.2024.8

2023   Gianluca Curzi, Anupam Das. Non-uniform complexity via non-wellfounded proofs. CSL (*Computer Science Logic*). https://doi.org/10.48550/arXiv.2211.16104

2023   Gianluca Curzi, Anupam Das. Computational expressivity of (circular) proofs with fixed points. LICS (*Logic in Computer Science*). https://arxiv.org/abs/2302.14825

2022   Gianluca Curzi, Anupam Das. Cyclic Implicit Complexity. LICS (*Logic in Computer Science*). https://doi.org/10.48550/arXiv.2110.01114

2021   Alessandro Aldini, Gianluca Curzi, Pierluigi Graziani, Mirko Tagliaferri. Trust Evidence Logic. ECSQARU (*European Conference in Symbolic and Quantitative Approaches to Reasoning with Uncertainty*). https://doi.org/10.1007/978-3-030-86772-0_41

2020   Gianluca Curzi, Michele Pagani. *The benefit of being non-lazy in probabilistic λ-calculus*. LICS (*Logic in Computer Science*). https://doi.org/10.1145/3373718.3394806

Preprints available online

2025   Gianluca Curzi, Lukas Melgaard. Cyclic proof theory of positive inductive definitions. Submitted to CSL (*Computer Science Logic*). Pre-print on Arxiv https://arxiv.org/abs/2507.13057.

2024   Gianluca Curzi, Anupam Das. Computational expressivity of (circular) proofs with fixed points. This is a long version of a conference paper submitted to *Logical Methods in Computer Science*. Pre-print on Arxiv https://arxiv.org/pdf/2302.14825.

2024   Gianluca Curzi, Anupam Das. Cyclic implicit complexity. This is a long version of a conference paper submitted to *Transaction on Computational Logic*. Pre-print on Arxiv https://arxiv.org/pdf/2110.01114.

2024   Matteo Acclavio, Gianluca Curzi, Giulio Guerrieri. Non-wellfounded parsimonious proofs and non-uniform complexity. In process of submission to LMCS *Logical Methods in Computer Science*. Pre-print on Arxiv. https://doi.org/10.48550/arXiv.2007.01733

2021   Curzi G., Roversi L. *Probabilistic Soft Type Assignment*. Pre-print on Arxiv. https://doi.org/10.48550/arXiv.2007.01733

Teaching and dissemination

Teaching

11/25 - 12/25   **Logical Theories**.
- Description: Teaching (co-lectured with Graham Leigh)
- Institution: Department of Philosophy, Linguistics and Theory of Science, University of Gothenburg, Sweden

09/25 - 10/25   **Lambda Calculus and Foundations of Programming Languages**.
- Description: Teaching (module leader)
- Institution: Department of Philosophy, Linguistics and Theory of Science, University of Gothenburg, Sweden

02/25 - 05/25   **Models of Computation**.
- Description: Teaching (module leader)
- Institution: Department of Philosophy, Linguistics and Theory of Science, University of Gothenburg, Sweden

10/24 - 12/24   **Logical Theories**.
- Description: Teaching (co-lectured with Graham Leigh)
- Institution: Department of Philosophy, Linguistics and Theory of Science, University of Gothenburg, Sweden

02/24 - 05/24   **Models of Computation**.
- Description: Teaching assistant
- Institution: Department of Philosophy, Linguistics and Theory of Science, University of Gothenburg, Sweden

05/23 - 06/23   **Massive Open Online Courses (MOOC)**.
- Description: Multimedial material for undergraduate students on recursion theory
- Institution: Department of Pure and Applied Sciences, University of Urbino, Italy

02/23 - 06/23   **Theory of Computation**.
- Description: Teaching assistant
- Institution: School of Computer Science, University of Birmingham, UK

04/22   **Proof Theory**.
- Description: Introductory course at *Midlands Graduate School*, co-lectured with Marianna Girlando
- Institution: School of Computer Science, University of Nottingham, UK

04/22   **Implicit Computational Complexity**.
- Description: Guest lecture for the course *Algorithms and Complexity*
- Institution: School of Computer Science, University of Birmingham, UK

02/20 - 04/20 **Massive Open Online Courses (MOOC)**.
- Description: Multimedial material for undergraduate students on λ-calculus, Turing machines and complexity
- Institution: Department of Pure and Applied Sciences, University of Urbino, Italy

11/19 **Logic and Theory of Reasoning**.
- Description: Teaching assistant
- Institution: Department of Pure and Applied Sciences, University of Urbino, Italy

09/18 - 12/18 **Introduction to Programming in Java**.
- Description: Teaching assistant
- Institution: Département d'Informatique, Paris Diderot University, France

09/18 - 12/18 **Databases**.
- Description: Teaching assistant
- Institution: Département d'Informatique, Paris Diderot University, France

Dissemination

twice a year **Logic, Games and Agency: the Symbolic Approach to AI** .
since 2024
- Description: I am giving guest lectures for the course *Logic and AI in Society: language, knowledge, and ethics*, which disseminates topics in AI to undergraduate students without a computer science background
- Institution: Department of Philosophy, Linguistics and Theory of Science, University of Gothenburg, Sweden

12/19 **Outreach activities for *Open Day***.
- Description: I gave a talk for high-school students introducing formal logic
- Institution: University of Urbino, Italy

11/19 **Outreach activities *Open Day***.
- Description: I gave a talk for high-school students introducing the notion of computation
- Institution: Secondary school "E. Mattei" of Urbino, Italy

05/17 **Poster Day**.
- Description: I presented a poster on *linear logic and computation*
- Institution: University of Turin, Italy

Workshops and conferences

Invited Speaker

01/2026 Invited to Schloss Dagstuhl Seminar *Arithmetical and Modal mu-Calculi: Recent and Future Advances*, Germany.

06/2024 Invited speaker for MFPS (*Mathematical Foundations for Programming Semantics*), special session on the semantics of non-wellfounded and circular proofs, Oxford, UK.

05/2022 Invited speaker for the monthly meetings series CHoCoLa (*Curry-Howard: Logic and Computation*), Lyon, France.

Conferences (presenting papers)

02/24   Infinitary cut-elimination via finite approximations. CSL 2024, Naples, Italy.

06/23   Computational expressivity of (circular) proofs with fixed points. LICS 2023, Boston, USA.

02/23   Non-uniform complexity via non-wellfounded proofs. CSL 2023, Warsaw, Poland.

08/22   Cyclic Implicit Complexity. LICS (in FLOC22), Haifa, Israel.

09/21   Trust Evidence Logic. ECSQUARU 2021, Prague, Czech Republic.

07/20   The Benefit of Being Non-Lazy in Probabilistic λ-calculus. LICS 2020, Saarbrücken, Germany.

06/20   Linear additives. TLLA-LINEARITY 2020, Paris, France.

Appointments, grants, awards and prizes

Appointments

10/19 - present   ***Subject-matter expert* in Logic and Computer Science**.
- Description: *Subject-matter expert* ("*Cultore della Materia*"). This is a title awarded by Italian institutions to those academic figures who have demonstrated substantial expertise in a specific scientific area. This role qualified me to engage in various teaching-related activities, including serving on exam committees and co-supervising Master's theses.
- Institution: Department of Pure and Applied Sciences, University of Urbino, Italy

Awards and prices

2018   **Scholarship "Bando Vinci"**.
- Description: The "Vinci" programme focuses on funding PhD students in joint thesis ("cotutelle") with a French university.
- Institution: Université Franco-Italienne

Grants

01/2025   **VR starting grant**.
- Description: I was awarded a four-year VR starting grant (Natural and Engineering Sciences Panel)
- Hosting institution: Department of Philosophy, Linguistics and Theory of Science of the University of Gothenburg, Sweden.
- Project Title: *Proofs with Cycles and Computation*
- Status: approved (score: 6/7, 5/7, 6/7, 3/3, 6/7)

04/22   **Application for the EPSRC Postdoctoral Fellowship**.
- Description: I applied for an EPSRC Postdoctoral Fellowship (EPSRC Reference: EP/X029042/1)
- Hosting institution: School of Computer Science of the University of Birmingham, UK.
- Project Title: *Cyclic Proofs in Complexity*
- Status: not funded (score: 6/6 , 5/6 , 4/6 , 4/6).

Professional service

Supervision

09/23 - present **PhD thesis supervision**.
- Description: I am assistant supervisor of Lukas Melgaard (second year PhD student)
- Institution: School of Computer Science of the University of Birmingham, UK.

02/24 - 05/24 **Master's thesis supervision**.
- Description: I co-supervised with Associate Professor Graham Leigh the Master's student Bente Gortworst
- Institution: Department of Philosophy, Linguistics and Theory of Science, University of Gothenburg, Sweden.
- Title of the thesis: *Cyclic Proofs for Theories of Truth*
- Defence: 31 May 2024.

Visiting

01/17 - 06/19 **Visiting PhD student**.
- Institution: Paris Diderot University, France
- Duration: 12 months

Organiser

09/25 Local organiser and co-funder of the workshop Cyclothon (University of Gothenburg, Sweden)

09/23 - 06/24 Local organiser of Logic Colloquium 2024

09/21 Local organiser of the conference TABLEAUX 2021

Program committee member

2024 PC member of the workship PS24 (*Proof Society Workshop*), Birmingham, UK

2024 PC member of the workshop CIFMA24 (*Cognition: Interdisciplinary Foundations, Models and Applications*)

2022 PC member of the workshop CIFMA22 (*Cognition: Interdisciplinary Foundations, Models and Applications*)

2021 PC member of the workshop CIFMA21 (*Cognition: Interdisciplinary Foundations, Models and Applications*)

Reviewer for conference and workshop papers

2025 ICALP (*International Colloquium on Automata, Languages, and Programming*)

2024 PS24 (*Proof Society Workshop*)

2024 MFCS (*Mathematical Foundations of Computer Science*)

2024 LICS (*Logic in Computer Science*)

2018-2021- 2022-2025- 2026	CSL (*Computer Science Logic*)
2021	ESOP (*European Symposium on Programming*)
2020	CIFMA (*Cognition: Interdisciplinary Foundations, Models and Applications*)

Reviewer for journal papers

2025	*Review of Symbolic Logic*
2024	*Logic Journal of the IGPL*
2021	*ACM Transactions on Programming Languages and Systems*

Skills and competences

Programming Language

Basic	HTML5
Intermediate	JAVA, MySQL

Languages

Italian	**Native**
English	**Fluent**
French	**Intermediate**