

Gabriele Lobbia

Postdoc in Mathematics

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Professional Experience

- 2022–present **Postdoctoral Researcher**, *Masaryk University*, Brno, Czech Republic.
Aug-Dec 2021 **Part-Time Researcher**, *Masaryk University*, collaborating with John Bourke on skew monoidal categories, multicategories and connections with higher dimensional categories.

Education

- 2018–2022 **PhD Student in Mathematics**, *Funded by an EPSRC Scholarship*, University of Leeds.
Supervisors Dr. N. Gambino and Prof. P. Martin
Thesis Title Pseudomonads, Relative Monads and Strongly Finitary Notions of Multicategory
2016–2018 **ALGANT Master Program Degree (M.S.)**, *Università degli studi di Milano* 110/110 cum laude, *Universität Regensburg* 1.0/1.0.
Advisor Prof. Dr. Denis-Charles Cisinski
Thesis Title Kan Complexes as a Univalent Model of Type Theory
2013–2016 **Laurea Triennale in Matematica (B.S.)**, *Università degli studi di Milano*, 110/110.

Research Interests

Category theory, universal algebra, skew structures, higher category theory, categorical logic.

Publications and Preprints

- *2020 *Distributive laws for relative monads*, arXiv:2007.12982.
2021 *On the formal theory of pseudomonads and pseudodistributive laws*, joint with Nicola Gambino, *Theory and Applications of Categories*, 37 (2), 2021, pp. 14-56.

Scholarships, Awards and Grants

- 2018–2022 EPSRC Scholarship

Conference Talks

- Finitary Definitions of Multicategory (CT20->21, Genova, Sep 2021, contributed)
- The Formal Theory of Pseudomonads (1st ItaCa Workshop, Milano, Dic 2019, contributed)
- The Formal Theory of Pseudomonads (Postgraduate Conference in Category Theory and its Applications, Leicester, Nov 2019, invited)

Seminar Talks, invited

- A nice picture of 2-cats (Se Mi Narri, Pavia online, Mar 2021)
- Distributive laws for relative monads (Masaryk University Algebra Seminar, Brno online, Dic 2020)
- A Formal Approach to Generalisations of Monads (Category Theory Seminar, Cambridge, Jan 2020)

Seminar Talks, contributed

- Monoidal Categories vs Multicategories (Postgraduate Logic seminar, Leeds online, Nov 2020)
- Distributive laws for relative monads (Virtual Logic Seminar, Leeds online, Jun 2020)
- Everything is connected, everything is Yoneda (Pure Postgraduate seminar, Leeds, Feb 2020)
- The Formal Theory of Pseudomonads (Proofs, computations and constructions, Leeds, Nov 2019)
- A nice picture of 2-cats (Pure Postgraduate seminar, Leeds, Mar 2019)
- Kan Complexes as a Univalent Model of Type Theory (Postgraduate Logic seminar, Leeds, Oct 2018)

Conferences, Workshops and Summer/Winter Schools

- Dic 2021 2nd ItaCa Workshop, Genova
- Sep 2021 CT20->21, Genova
- Apr–Jun 2021 ItaCa Fest 2021, online
- Jun–Dic 2020 ItaCa Fest 2020, online
- Dic 2019 1st ItaCa Workshop, Milano
- Nov 2019 Postgraduate Conference in Category Theory and its Applications, Leicester
- July 2019 CT 2019, Edinburgh
- June 2019 Higher Topos Theory and Univalent Foundations, Leeds
- May 2019 PSSL 105 (Peripatetic Seminar on Sheaves and Logic), Palermo

Teaching

- Spring 2021 Tutorials (≈ 10 students) for MATH1026 Sets, Sequences and Series, University of Leeds
- Autumn 2020 Marking for MATH2022 Groups and Vector Spaces, University of Leeds
- Autumn 2020 Drop-in sessions for MATH2022 Groups and Vector Spaces, University of Leeds
- Spring 2020 Tutorials (≈ 10 students) for MATH1400 Modelling with Differential Equations, University of Leeds
- Spring 2020 Tutorials (≈ 10 students) for MATH1060 Introductory Linear Algebra, University of Leeds
- Autumn 2019 Workshops (≈ 40 students) for MATH2022 Groups and Vector Spaces, University of Leeds
- Autumn 2019 Tutorials (≈ 10 students) for MATH1225 Introduction to Geometry, University of Leeds
- Spring 2019 Marking for MATH3044 Number Theory, University of Leeds
- Spring 2019 Tutorials (≈ 10 students) for MATH1026 Sets, Sequences and Series, University of Leeds

Conference Organisation

- June 2019 Member of the Organising Committee of the Higher Topos Theory and Univalent Foundations Summer School 2019, Leeds

Seminar Organisation

- 2019–2021 Co-organiser of the Pure Postgraduate Seminar, Leeds

Professional Memberships

- 2018–present Student member of the Association for Symbolic Logic

Computer Skills

Languages \LaTeX , C
Platforms Windows

Languages

Italian Native
English Fluent