Filippo Giovagnini Ph.D. Candidate

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https://filippogiovagnini.github.io/

Research Interests

- Stochastic Partial Differential Equations
- Fluid Dynamics
- Mean field limit
- Neural SPDEs

Education

Imperial College London London, UK
PhD in Stochastic Analysis December 2023 – ongoing
- Supervised by Prof. Dan Crisan
- Affiliated with the Mathematics for our Future Climate CDT
- Working on approximations of SPDEs with interacting particle systems. To see more about it, visit https://filippogiovagnini.github.io/.

University of Pisa Pisa, Italy
Master of Mathematics September 2021 – October 2023
- GPA: 30/30, Graduation score: 110/110 cum laude.

ETH Zurich Zurich, Switzerland
Exchange Program February 2023 - August 2023
- Awardee of the Only Scholarship for the University of Pisa.
- Optimal Transport applied to Finance, Quantitative Risk Management, Applied Stochastic Processes, Economic Theory of Financial Markets.

University of Pisa Pisa, Italy
Bachelor of Mathematics 2018 - 2021
- GPA: 29.85/30, Graduation score: 110/110 cum laude.
- Courses: Stochastic Calculus, Sobolev Spaces, Differential Topology, BV Spaces, Mathematical Finance.

Preprints

A uniform point vortex approximation for the solution of the two-dimensional Navier Stokes equation with transport noise | Filippo Giovagnini, Dan Crisan
- Submitted to Journal
- https://arxiv.org/abs/2410.23163

Experiences

Imperial College Business School | London, UK September 2024 - Ongoing
- Teaching Assistant for the "Stochastic Calculus for Finance" module of the Risk Management Msc

University of Bologna | Bologna, IT December 2024 (to start)
- Talk about particles systems for the ASK Conference 2024
- See the official website here .

Stony Brook | New York, US January 2025 (to start)
- One-week-long probability winter school
- Grant for fully funded travels and lodging

Alhambra PDE Days | Granada, Spain July 2024

BCAM, Bilbao | Bilbao, Spain March 2024 - April 2024
- Fully funded by BCAM

Scuola Normale Superiore | Pisa, Italy February 2024
- Workshop on Fluid Dynamics with lectures and seminars.

Imperial College Business School | London, UK December 2023 - January 2024

- Marking exams.

University of Pisa | Pisa, Italy January 2023 - June 2023

- Writing official notes for Analysis 2 and Istituzioni di Analisi.

Junior Math Days, SISSA | Trieste, Italy December 2022

Teaching Assistant | University of Pisa July 2022 - September 2022

- Conducted a one-week course and tutorials for first-year students.

Skills

Languages: Italian (Native), English (Fluent), Spanish (Conversational).

Mathematical Tools: Stochastic Analysis, PDEs, Fluid Dynamics, Numerical Analysis.

Technical Skills: Python, Pytorch, MATLAB, LaTeX.