Filippo Giovagnini   Ph.D. Candidate

f.giovagnini23@imperial.ac.uk
https://filippogiovagnini.github.io/

Employment

- PhD candidate in Stochastic Analysis at Imperial College London.
- Working part-time for Aleta Index as a Machine Learning Engineer.
- Affiliated with the Mathematics for our Future Climate CDT.

Education

Imperial College London   London, UK
PhD in Pure Mathematics   December 2023 – ongoing
- Supervised by Prof. Dan Crisan
- Find more about my research: https://filippogiovagnini.github.io/research.html.

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.

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

A uniform particle approximation to the Navier-Stokes-alpha models in three dimensions with advection noise | Filippo Giovagnini, Dan Crisan
- https://arxiv.org/abs/2504.12960

Teaching Assistant roles

Imperial College Business School | London, UK   September 2025 - January 2026
- "Stochastic Calculus for Finance" module of the Risk Management MSc

Imperial College Business School | London, UK   September 2024 - January 2025
- "Stochastic Calculus for Finance" module of the Risk Management MSc

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 Higher Analysis.

Teaching Assistant | University of Pisa   July 2022 - September 2022
- Conducted a one-week course and tutorials for first-year students.

Experiences

University of Padova | Padova, Italy — September 2025
- Invited speaker at https://www.yamc.it/
- To happen soon.

Scuola Normale Superiore | Pisa, Italy — February 2025
- Workshop on Fluid Dynamics with lectures and seminars.

University of Bologna | Bologna, IT — December 2024
- Given a short talk
- See the website here.

Stony Brook | New York, US — January 2025
- Given a short talk + one-week-long winter school
- Grant for fully funded travels and lodging
- See the website here.

Alhambra PDE Days | Granada, Spain — July 2024

BCAM, Bilbao | Bilbao, Spain — March 2024 - April 2024
- Two-months long - Fully funded by BCAM

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

Junior Math Days, SISSA | Trieste, Italy — December 2022

Skills

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

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

Technical Skills: Python, TensorFlow, PyTorch, Pandas, Numpy, Jax, MATLAB, LaTeX.