Aurora Poggi

Curriculum Vitae

Lindstedtsvägen 25 114 28 Stockholm, Sweden ⊠ aurorap@kth.se

Education

January 2023 PhD student in Applied and Computational Mathematics founded by the WASP Program,

Dynamical systems, Data driven methods and Inverse Problems, KTH Royal Institute of Technology, Stockholm, Sweden.

2020 - 2022 Master's degree in Mathematics,

University of Verona, Italy.

June 2022 - Master thesis,

September Bergische Universität Wuppertal, Germany.

2022

2021 - 2022 **Erasmus + Study**,

University of Oslo, Norway.

2022 - 2022 Partnership,

University of Trento, Italy.

2017 - 2020 Bachelor's degree in Applied Mathematics,

University of Verona, Italy.

Teaching

Spring 2025 SF2943, 'Time Series Analysis'.

Autumn 2024 SF1672, HT23 'Linear Algebra'.

Spring 2024 SF1685, VT24 'Calculus in One Variable'.

Autumn 2023 SF1672, HT23 'Linear Algebra'.

Spring 2023 SF1677, VT23 'Foundation of Analysis'.

Conferences

22 - 26 **YAMC 2025**,

September Padova, Italy.

2025 Talk

4 - 8 August MSML 2025,

2025 Naples, Italy.

Poster presentation

28 July - 1 **AIP 2025**,

August 2025 FGV, Rio de Janeiro, Brasil.

Talk at MS11 XAIP

15 - 29 June PINN Summer School,

2025 KTH, Stockholm, Sweden.

14-15 January WASP Winter Conference,

2025 *WASP, Norrköping*, Sweden.

Poster presentation

12 - 16 **Generative AI Summer School**,

August 2024 WASP, Norrköping, Sweden.

24 - 26 July Data-driven Dynamical Systems Summer School,

2024 University of Bremen, Germany.

20 May - 21 Scientific Machine Learning for Simulation and Inverse Modelling,

June 2024 Digital Futures, Stockholm, Sweden.

10-12 January WASP Winter Conference,

2023 Norrköping, Sweden.

6-10 June Participate as student,

2022 ICCF2022: International Conference on Computational Finance,

Bergische Universität Wuppertal, Germany.

Publications

Preprint

May 2025 Data-driven multi-agent modelling of calcium interactions in cell culture: PINN vs Regularized Least-squares, Aurora Poggi, Giuseppe Alessio D'Inverno, Hjalmar Brismar, Ozan Öktem, Matthieu Barreau, Kateryna Morozovska, Under Review, Arxiv.

Working *Deep Learning for Modeling Filamentous Sludge Bulking*, Authors: Armando Assembleia, Andre paper: Di Luca, Alba Gurpegui, Dennis Modesti, Aurora Poggi, Thomas Trinh, Cambridge University Press.

Journal Papers

April 2023 Electricity Price Forecasting via statistical and deep learning approaches: the German case,

Authors: Luca Di Persio, Matthias Ehrhardt, Aurora Poggi, MDPI.

Computer Skills

Languages LaTeX, Python, MATLAB/Octave, Microsoft Excel, HTML

Languages

Languages Italian (Mothertongue), English (Fluent)