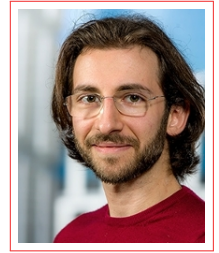# Gianluca Finocchio

*PhD Candidate with strong interest
in Bayesian statistics, neural networks
and empirical processes.*

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Academic experience and education

2021–present   **Praedoc/Postdoc**, *University of Vienna*.
Statistical Methods group led by Prof. T. Krivobokova
Main topic: Partial Least Squares Regression for protein data.

2019–2021 (Twente)   **PhD Candidate**, *Leiden University and University of Twente*.
Supervisors (Twente): Prof. A.J. Schmidt-Hieber, Prof. K. Proksch.

2017–2019 (Leiden)   Supervisors (Leiden): Prof. A.J. Schmidt-Hieber, Prof. A.W. van der Vaart.
Main topics:
- *semiparametric Bernstein-von Mises results (and failure thereof) in a Gaussian sequence model;*
- *theory of deep Gaussian process priors and connection to wide neural networks;*
- *robust simultaneous estimation with the median-of-means approach.*

2014–2017   **Laurea Magistrale (Master's degree) in Mathematics**, *University of Pisa, Grade: 110/110 cum laude.* Supervisors: Prof. F. Flandoli, Prof. D. Trevisan.
Topic: seminal paper by Karl Oeschlager on dynamics of systems of moderately interacting particles.

2010–2014   **Laurea Triennale (Bachelor's degree) in Mathematics**, *University of Pisa, Grade: 100/110.* Supervisor: Prof. M. Romito.
Topic: Dyson Brownian Motion.

Teaching and supervision

2019–2020   **Tutoring**, *Statistics and Probability module for IBA at University of Twente*.
On campus exercise sessions, exam supervision and grading.

2017–2018   **Teaching assistant**, *Mathematical Statistics class at MI Leiden University*.
Office hours, homework grading, exam supervision and grading.

Publications and Preprints

2021   Finocchio, G., Derumigny A. and Proksch, K. Robust-to-outliers square-root LASSO, simultaneous inference with a MOM approach. *ArXiv preprint, arXiv:2103.10420*

2020   Finocchio, G. and Schmidt-Hieber, J. Bayesian variance estimation in the Gaussian sequence model with partial information on the means. *Electron. J. Statist. 14 (1) 239 - 271, 2020.*

2018   Finocchio, G. and the SciSport Collaboration. SciSports: Learning football kinematics through two-dimensional tracking data. *Proceedings of the 135th European Study Group Mathematics with Industry.*

Invited speaker to conferences

2019   11th ICSA International Conference, Hangzhou, China, Dec 20–22, 2019.
Presented the paper "Bayesian variance estimation in the Gaussian sequence model with partial information on the means".

Workshops

2018 Collaboration on the SciSport problem "Player evaluation in soccer using 2D tracking data" during the meeting "SWI", Eindhoven, Jan 29–Feb 2, 2018.
Group work with the aim of applying machine learning to live soccer data.

Presentations in conferences

2019 27th Meeting of PhD students in Stochastics, Hilversum, May 27–29, 2019.
Presented PhD research.

2019 Bayes Club, Amsterdam, Feb 2, 2019. *Presented "Bayesian variance estimation in the Gaussian sequence model with partial information on the means".*

2018 26th Meeting of PhD students in Stochastics, Vught, May 28–30, 2018.
Presented PhD research.

2018 Oberwolfach Seminar: Statistical Inference for Complex Data: Random Matrices, Random Functions and Geometry and Topology, Oberwolfach, Germany, May 20–26, 2018. *Presented work related to bachelor thesis and Dyson Brownian motion.*

2018 Structural Inference spring school, Lubbenau, Germany, Mar 4–9, 2018.
Presented poster "Bayesian variance estimation in the Neyman-Scott problem".

Scholarships and Awards

2018 **Sergio Marchionne Student Achievement Awards**
A scholarship in honour of Sergio Marchionne, presented by Fiat Chrysler Automobiles and CNH Industrial to sons and daughters of their employees who have excelled in their studies.

2011 **Premi e Borse di Studio FIAT**
A scholarship presented by Fiat and Fiat Industrial to sons and daughters of their employees who have excelled in their studies.

Soft Skills

Certificates Scientific integrity, *Moral standards of the Netherlands Code of Conduct.*
Time and self management, *Application of SMART principles.*
Communication in science, *Writing and presentation skills.*
Intercultural sensitivity, *Cultural dimensions and the GLOBE project.*

Computer skills

R, Latex, Python, C, Matlab/Octave.

Languages

Italian (mother tongue), English (fluent), French (good), Dutch (beginner)