# Francesco Gaffi

CURRENT POSITION: Robert and Sara Lumpkins Postdoctoral Fellow in Statistics

Department of Applied and Computational Mathematics and Statistics

University of Notre Dame, Indiana, USA

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#### EDUCATION

2023 | Ph.D. in Statistics, cum laude

**Bocconi University** 

Milano, Italy

Supervisors: Antonio Lijoi and Igor Prünster

Thesis: Modeling with discrete random probability measures

2018 M.Sc. in Pure and applied mathematics, cum laude

Università di Roma Tor Vergata

Italy

Supervisor: Domenico Marinucci

Thesis: Functional data analysis on  $\mathcal{L}^{2}\left(\mathbb{S}^{2}\right)$ 

2016 B.Sc. in MATHEMATICS

Università di Roma Tor Vergata

Italy

2014 M.Mus. in Orchestral Repertoire and Chamber Music, cum laude

Conservatorio Licinio Refice

Frosinone, Italy

2011 B.Mus. in Clarinet

Conservatorio Licinio Refice

Frosinone, Italy

#### Academic Positions

2023 - CURRENT | **Postdoctoral Fellow**, University of Notre Dame, Indiana, USA 2022 - 2023 | **Ph.D. Candidate**, Bocconi University, Milano, Italy

2018 - 2022 | Ph.D. Student, Bocconi University, Milano, Italy

# Work experience

2016 - 2017 | Quantitative analyst intern, Ladbrokes Coral Roma, Italy

## Awards&Funding

- 2023 Robert and Sara Lumpkins Postdoctoral Fellowship (3.5 years), University of Notre Dame
  - Student Paper Award, American Statistical Association Section on Bayesian Statistical Science
- 2022 Special financial support for PhD candidates, Bocconi University and Fondazione Invernizzi
  - ISBA2022 Travel Award, International Society for Bayesian Analysis
  - BNP2022 Travel Award, International Society for Bayesian Analysis
- 2018 | PhD Scholarship (4 years), Bocconi University
- 2014 'V. Mancini' Rotary Award for Best Graduate Student Winds Section, Conservatorio Licinio Refice

# EDITORIAL ACTIVITY

Reviewer for Electronic Journal of Statistics, Journal of the American Statistical Association, Statistics and Probability Letters.

# RESEARCH NETWORKS AND SOCIETIES

Member of International Society for Bayesian Analysis, ISBA

Institute of Mathematical Statistics, IMS

BayesLab of Bocconi Institute for Data Science and Analytics, BIDSA

Complex Data Modeling Research Network, led by MiDaS

Società Italiana di Statistica, SIS

International Indian Statistical Society, IISA

American Statistical Society

Organizer of BayesLab reading group

#### **PUBLICATIONS**

#### Journal papers

DURANTE D., GAFFI F., LIJOI, A., PRÜNSTER, I. (2023). **Partially exchangeable stochastic block models for multilayer networks.** *In revision.* [2023 ASA-SBSS Student Paper Award winner]

Gaffi, F., Lijoi, A., Prünster, I. (2022). Random probability measures with fixed mean distribution. *Under review*.

GAFFI, F., LIJOI, A., PRÜNSTER, I. (2023+). Transition probabilities of continual Young diagrams and Dirichlet random means. Working paper.

#### Conference proceedings

GAFFI, F., LIJOI, A., PRÜNSTER, I. (2022). **Specification of the base measure of nonparametric priors via random means.** In *New Frontiers in Bayesian Statistics - BAYSM2021*, Argiento, R., Camerlenghi, F., Paganin, S. eds, pages 91-100, vol. 405, Springer Proceedings in Mathematics and Statistics. Springer, Cham.

#### Presentations

#### Invited talks

JULY 2024	<b>ISBA2024</b> , World Meeting of the International Society for Bayesian
	Analysis, Università Ca' Foscari, Venezia, Italy.
June 2024	Fourth Italian Meeting on Probability and Mathematical
	Statistics, Roma, Italy.
August 2023	$\star$ JSM2023, Joint Statistical Meetings, Toronto, Canada.
	$\star$ EcoSta2023, 6th International Conference on Econometrics and Statis-
	tics, Waseda University, Tokyo, Japan.
June 2023	10th International Purdue Symposium on Statistics, Purdue Uni-
	versity, West Lafayette, USA.
December 2022	IISA2022, International Indian Statistical Association Conference, In-
	dian Insitute of Science, Bengaluru, India.
June $2022$	Third Italian Meeting on Probability and Mathematical Statis-
	tics, Alma Mater Studiorum, Bologna, Italy.
June 2021	EcoSta2021, 4th International Conference on Econometrics and Statis-
	tics, virtual.

#### Contributed talks

June 2022 | ISBA2022, World Meeting of the International Society for Bayesian Analysis, Montréal, Canada.

APRIL 2022 | BNP2022, BNP Networking event, University of Cyprus, Nicosia, Cyprus.

SEPTEMBER 2021 | BaySM2021, Bayesian Young Statisticians Meeting, virtual.

\* ISBA2021, World Meeting of the International Society for Bayesian Analysis, virtual.

\* ISBA@CIRM, Junior session of ISBA2021 mirror event, Centre International de Rencontres Mathématiques, Marseille, France.

#### Poster sessions

June 2023	Approximation Methods in Bayesian Analysis, Centre Interna-
	tional de Rencontres Mathématiques, Marseille, France.
October 2022	BNP13, 13th International Conference on Bayesian Nonparametrics,
	Puerto Varas, Chile.

# SUMMER SCHOOLS

July 2019	Random graphs and complex networks: structure and function,
	Bocconi Summer School in Advanced Statistics and Probability, Como,
	Italy

## TEACHING

Fall 2023	Lecturer, University of Notre Dame
	• Probability, B.Sc. in Applied and Computational Mathematics and Statistics
2021 - 2023	Adjuct lecturer, Bocconi University
	• Statistics, B.Sc. in Economics
2020 - 2023	Adjuct lecturer, Bocconi University
	• Probability, Ph.D. in Economics and Finance
2020 - 2022	Adjuct lecturer, Bocconi University
	• Probability, B.Sc. in Mathematics for Artificial Intelligence
2019 - 2023	Teaching assistant, Bocconi University
	• Statistics, B.Sc. in Economics
	• Stochastic processes, M.Sc. in Data Science
2019 - 2022	Teaching assistant, Bocconi University
	• Optimal control, M.Sc. in Data Science
2017 - 2018	Teaching assistant, Università di Roma Tor Vergata
	• Discrete mathematics, B.Sc. in Computer Science

# Computer skills

Programming languages: C/C++, Latex

Software: R, Matlab

Environments: Microsoft Windows, Linux distributions