Francesco Gaffi

CURRENT POSITION: Postdoctoral Associate in Statistics

Department of Mathematics

University of Maryland, College Park, MD, USA

EMAIL: fgaffi@umd.edu

EDUCATION

2023 | Ph.D. in Statistics, with honors

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, with honors

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, with hon-

ors

Conservatorio Licinio Refice

Frosinone, Italy

2011 B.Mus. in Clarinet

Conservatorio Licinio Refice

Frosinone, Italy

ACADEMIC POSITIONS

2024 - Current	Postdoctoral Associate, University of Maryland, College Park, MD,
	USA
2023 - 2024	Postdoctoral Fellow, University of Notre Dame, IN, USA
2022 - 2023	Ph.D. Candidate, Bocconi University, Milano, Italy
2018 - 2022	Ph.D. Student, Bocconi University, Milano, Italy

INDUSTRY EXPERIENCE

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

AWARDS&FUNDING

2023	Robert and Sara Lumpkins Postdoctoral Fellowship (3.5 years), Univer-
	sity 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, Journal of Econometrics

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, ASA

Organizer of BayesLab reading group

Publications

Working papers

Gaffi, F., Josephs, N., Lin, L. Nonparametric priors for graph matching.

Franzolini, B., Gaffi, F. An invariance-based approach to community detection in dynamic networks.

GAFFI, F., LIJOI, A., PRÜNSTER, I. Transition probabilities of continual Young diagrams and Dirichlet random means.

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*.

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.

Theses

 ${\it Gaffi},~{\it F.}~(2023).$ Modelling with discrete random probability measures. Bocconi University, Milano.

Gaffi, F. (2018). Functional data analysis on $\mathcal{L}^2(\mathbb{S}^2)$. Università di Roma Tor Vergata, Roma.

Teaching related

FORTINI, S., GAFFI, F. (2021). Introduction to Probability. BAI 30456. Bai series. Volume 2. Egea, Milano.

Presentations

Invited talks

September 2024	Frontiers of Bayesian Inference and Data Science, Casa
	Matemática Oaxaca, Mexico.
August 2024	Bernoulli-IMS2024, 11th World Congress in Probability and Statis-
	tics, Ruhr University Bochum, Germany.
July 2024	ISBA2024, 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	JSM2023, Joint Statistical Meetings, Toronto, Canada.
	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 Institute 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

NOVEMBER 2023 June 2022	BaYSM2023, Bayesian Young Statisticians Meeting, virtual. 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.
June 2021	ISBA2021, World Meeting of the International Society for Bayesian
	Analysis, virtual.
	ISBA@CIRM, Junior session of ISBA2021 mirror event, Centre Inter-
	national 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

2024 - CURRENT	Lecturer, University of Maryland, College Park
	\star Applied probability and statistics, B.Sc. in Computer Science
2023 - 2024	Lecturer, University of Notre Dame
	\star Probability, B.Sc. in Applied and Computational Mathematics and Statistics
2020 - 2023	Adjunct lecturer, Bocconi University
	 ★ Probability, B.Sc. in Mathematics for AI (2 semesters) ★ Probability, Ph.D. in Economics and Finance (3 semesters) ★ Statistics, B.Sc. in Economics (2 semesters)
2019 - 2023	Teaching assistant, Bocconi University
	 ★ Optimal control, M.Sc. in Data Science (3 semesters) ★ Statistics, B.Sc. in Economics (4 semesters) ★ Stochastic processes, M.Sc. in Data Science (4 semesters) ★ Probability, B.Sc. in Mathematics for AI (2 semesters)
2017 - 2018	Teaching assistant, Università di Roma Tor Vergata
	\star Discrete mathematics, B.Sc. in Computer Science

COMPUTER SKILLS

Programming languages: C/C++, LATEX

Software: R, MATLAB

Environments: Microsoft Windows, Linux distributions