

CONTACT INFORMATION	Address: Corso Unione Sovietica 218/bis 10134 Turin, Italy Email: giovanni.rebaudo@unito.it Website: https://giovannirebaudo.github.io	
CURRENT POSITIONS	University of Turin , Turin, Italy	
	Assistant Professor (RTDA secs-s/01)	3/2023–Present
	Department of Economics, Social Studies, Applied Mathematics and Statistics (ESOMAS)	
	Collegio Carlo Alberto , Turin, Italy	
	Research affiliate , “de Castro” Statistics Initiative	3/2023–Present
	Bocconi Institute for Data Science and Analytics (BIDSA) , Milan, Italy	
	Research affiliate , Bayesian Learning Laboratory (Bayes Lab)	6/2020–Present
PAST POSITION	University of Texas at Austin , Texas, USA	
	Post–Doctoral Research Fellow , Department of Statistics and Data Sciences	10/2020–2/2023
Mentors: Peter Müller and Abhra Sarkar		
EDUCATION	Bocconi University , Milan, Italy	
	Ph.D. in Statistics . Awarded with honors	9/2016–9/2020 (Thesis Defense 2/2021)
	<ul style="list-style-type: none">Title: <i>Bayesian Inference for Complex Data Structures: Theoretical and Computational Advances</i>Advisors: Antonio Lijoi and Igor Prünster	
	University of Trieste , Trieste, Italy	
	M.S. in Statistical and Actuarial Sciences . Final mark: 110/110 with honors	9/2014–7/2016
	<ul style="list-style-type: none">Title: <i>Bayesian Hierarchical Model: Theory and Application</i>Advisors: Francesco Pauli and Nicola Torelli	
	University of Milano-Bicocca , Milan, Italy	
	B.S. in Statistical and Economic Sciences . Final mark: 110/110 with honors	9/2011–7/2014
	<ul style="list-style-type: none">Title: <i>A New Technique for Estimation of Logarithmic Time Series Models: Forecast Comparison Based on Economic Data</i>Advisor: Matteo Maria Pelagatti	
RESEARCH INTERESTS	Bayesian Methods and Computation, Cluster Analysis, Bayesian Nonparametrics, Dimensionality Reduction, Time-Series Analysis, Predictive Inference, Categorical Regression, Auditory Neuroscience, Single-Cell RNA.	
PUBLICATIONS	Papers in Peer-Reviewed Journals	
	<ol style="list-style-type: none">Ascolani, F., Lijoi, A., Rebaudo, G. and Zanella, G. (2023). Clustering consistency with Dirichlet process mixtures. <i>Biometrika</i>, 110, 551–558.Lijoi, A., Prünster, I. and Rebaudo, G. (2023). Flexible clustering via hidden hierarchical Dirichlet priors. <i>Scandinavian Journal of Statistics</i>, 50, 213–234.Fasano, A., Rebaudo, G., Durante D. and Petrone S. (2021). A closed-form filter for binary time series. <i>Statistics and Computing</i>, 31:47, 1–20.	
	Papers under Review	
	<ol style="list-style-type: none">Rebaudo G. and Müller, P. Graph-aligned random partition model (GARP).Franzolini, B. and Rebaudo G. Entropy-regularized probabilistic clustering.Lin Q., Rebaudo G. and Müller, P. Separate exchangeability as modeling principle in Bayesian nonparametrics.Roark, C. L., Paulon, G., Rebaudo, G., McHaney, J. R., Sarkar, A. and Chandrasekaran, B. Individual differences in working memory impact decision processes during speech category learning.Rebaudo G., Llanos, F., Chandrasekaran B. and Sarkar, A. Bayesian mixed multidimensional scaling for auditory processing.	
	Discussions	

9. Rebaudo G., Fasano, A., Franzolini, B. and Müller, P. (2023) **A discussion on: “Evaluating sensitivity to the stick-breaking prior in Bayesian nonparametrics”** by Giordano, R., Liu, R., Jordan M. I. and Broderick T. *Bayesian Analysis*, 18, 345–347.
10. Catalano, M., Fasano, A. and Rebaudo G. (2023) **A discussion on: “Martingale posterior distributions”** by Fong, E., Holmes C. and Walker S. *Journal of the Royal Statistical Society Series B* [in press]

Conference Proceedings (Peer-Reviewed)

11. Anceschi N., Fasano, A. and Rebaudo G. (2023). **Expectation propagation for the smoothing distribution in dynamic probit.** *Bayesian Statistics, New Generations New Approaches (BaYSM2022)*. [in press]
12. Fasano, A., Anceschi N., Franzolini, B. and Rebaudo G. (2023). **Efficient computation of predictive probabilities in probit models via expectation propagation.** *Book of Short Papers - CLADAG 2023*. [in press]
13. Franzolini, B., Bondi, L., Fasano, A. and Rebaudo G. (2023). **Bayesian forecasting of multivariate longitudinal zero-inflated counts: an application to civil conflict.** *Book of Short Papers - CLADAG 2023*. [in press]
14. Fasano, A., Anceschi N., Franzolini, B. and Rebaudo G. (2023). **Efficient expectation propagation for posterior approximation in high-dimensional probit models.** *Book of Short Papers - SIS 2023*. [in press]
15. Fasano, A., Rebaudo G. and Anceschi N. (2022). **Bayesian inference for the multinomial probit model under Gaussian prior distribution.** *Book of Short Papers - SIS 2022*, 871–876.
16. Franzolini, B. and Rebaudo G. (2022). **A regularized-entropy estimator to enhance cluster interpretability in Bayesian nonparametric.** *Book of Short Papers - SIS 2022*, 387–398.
17. Fasano, A. and Rebaudo G. (2021). **Variational inference for the smoothing distribution in dynamic probit models.** *Book of Short Papers - SIS 2021*, 1076–1081.

AWARDS

Academic Awards

- [2020] Special financial support, Bocconi University.
 [2020] Research fellowship, Bocconi University.
 [2016-20] Merit-based Ph.D. fellowship, Bocconi University.

Data Competitions

- [2018] **Predictive challenge:** best objective prediction. **Stat Under the Stars 4**.
 [2017] **Predictive challenge:** first position. YoungCLADAG data contest.

Travel Awards

- [2023] Travel award, IISA conference (750\$).
 [2022] Travel award, BNP world meeting (1000\$).
 [2022] Travel award, ISBA world meeting (300\$).
 [2019] Travel award, O’Bayes conference (400£).

SERVICE TO PROFESSION

Referee (selected — alphabetical order)

Annals of Statistics • Bayesian Analysis • Electronic Journal of Statistics • Journal of Machine Learning Research • Scandinavian Journal of Statistics • Statistical Methods & Applications • Statistical Science.

Paper Competition Reviewer

Student Paper Competition for Section on Bayesian Statistical Science (SBSS) of the American Statistical Association (ASA). **2022**

Volunteer for the European Researchers’ Night. Milan, Italy.

9/2019

RESEARCH NETWORKS & MEMBERSHIPS

I am a member of the:

Complex Data Modeling Research Network led by **MiDaS**, Institute of Mathematical Statistics [IMS], International Society for Bayesian Analysis [ISBA], Italian Statistical Society [SIS].

GRANTS & FUNDING

Member of the Research Project of National Interest (PRIN) group “Discrete random structures for Bayesian learning and prediction.” (National Coordinator: Antonio Lijoi; Funding Agency: Italian Ministry of University and Research; Duration: 2023-25).

Member of the NIH project research group “Bayesian methods for optimizing combination antiretroviral

therapy for mental health in people with HIV” (Principal Investigator: Yanxun Xu; Funding Agency: The National Institutes of Health; Duration: 2022-27).

Member of the NSF project research group “Novel statistical frameworks for local inference in neuroscience of learning” (Principal Investigator: Abhra Sarkar; Funding Agency: The National Science Foundation; Duration: 2020-23).

Member of the NSF project research group “Collaborative research: Bayesian inference for interpretable random structures” (Principal Investigator: Peter Müller; Funding Agency: The National Science Foundation; Duration: 2020-23).

Member of the Research Project of National Interest (PRIN) group “Modern Bayesian nonparametric methods” (National Coordinator: Igor Prünster; Funding Agency: Italian Ministry of University and Research; Duration: 2017-20).

TEACHING
EXPERIENCE

Excellence in Teaching Certificates

- Bocconi Excellence in Advanced Teaching by BUILT (**BEAT**).

2019

Lecturer at **University of Turin**, Turin, Italy

- Statistics - B.Sc. (AY 2022/2023, 2023/2024).
- Introduction to Data Science: Statistical Learning and Data Analytics - B.Sc. (AY 2022/2023, 2023/2024).

Guest Lecturer at **University of Texas at Austin**, Texas, USA

- Monte Carlo Methods - Ph.D. (AY 2022/2023).
- Mathematical Statistics I - Ph.D. (AY 2022/2023).
- Introduction to Mathematical Statistics - B.Sc. (AY 2022/2023).

Teaching Assistant at **Bocconi University**, Milan, Italy

- Machine Learning II - M.Sc. (AY 2020/2021, AY 2019/2020).
- Data Analysis - M.Sc. (AY 2019/2020, AY 2018/2019, AY 2017/2018).

SCHOOLS

[2018] **Graphical Models.**

Bocconi Summer School in Advanced Statistics and Probability. Como, Italy.

Instructors: S. Lauritzen (University of Copenhagen) and R. Evans (University of Oxford).

[2017] **Statistical Causal Learning.**

Bocconi Summer School in Advanced Statistics and Probability. Como, Italy.

Instructors: B. Schölkopf (Max Planck Institute for Intelligent Systems, Tübingen), I. Tolstikhin (Google AI, Zürich) and D. Lopez-Paz (Facebook AI Research, Paris).

PRESENTATIONS

Invited Presentations

[2024] Interpretable Inference via Principled BNP Approaches in Biomedical Research and Beyond. Singapore, SG.

[2023] EcoSta 2023 [International Conference on Econometrics and Statistics]. Tokyo, Japan.

[2023] Approximation Methods in Bayesian Analysis [CIRM Workshop]. Luminy, France.

[2022] IISA Conference 2022 [International Indian Statistical Association]. Bangalore, India.

[2022] ISBA 2022 [International Society of Bayesian Analysis]. Montreal, Canada.

[2021] CMStatistics–ERCIM 2021 [14th International Conference of the ERCIM WG on Computational and Methodological Statistics]. London, UK (online).

[2021] BIRS–CMO [Workshop on Foundations of Objective Bayesian Methodology]. Oaxaca, Mexico.

[2021] EcoSta 2021 [International Conference on Econometrics and Statistics]. Hong Kong (online).

[2021] BISP 12 [Bayesian Inference in Stochastic Processes]. Milan, Italy, with discussion (online).

[2020] CMStatistics–ERCIM 2020 [13th International Conference of the ERCIM WG on Computational and Methodological Statistics]. London, UK (online).

[2019] IISA Conference 2019 [International Indian Statistical Association]. Mumbai, India.

[2019] Second Italian Meeting in Probability and Statistics. Vietri sul Mare, Italy.

Contributed Presentations

[2022] BNP13 [International Conference on Bayesian Nonparametrics]. Puerto Varas, Chile.

[2022] ENAR Meeting [Eastern North American Region International Biometric Society]. Houston, USA (online).

Poster Presentations

[2019] O’Bayes 2019 [Objective Bayes Methodology Conference]. Warwick, United Kingdom.

[2019] BNP12 [International Conference on Bayesian Nonparametrics]. Oxford, United Kingdom.

Seminars

[2021] SDS Seminar Series. Department of Statistics and Data Sciences at the University of Texas at Austin, USA (online).

COMPUTER SKILLS

Statistical Software and Programming Language: R, Python, SAS, STAN, MATHEMATICA.