# Marta Catalano

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https://martacatalano.github.io

### **Academic Positions**

Sep 2021 – Present	Harrison Early Career Assistant Professor, Statistics Department, Warwick University.
Feb 2021 – Sep 2021	Postdoctoral Researcher, University of Torino. Supervisor: Pierpaolo De Blasi.
Sep 2020 – Present	Research Affiliate, "de Castro" Statistics Initiative, Collegio Carlo Alberto, Torino.
Jun 2020 – Present	Research Affiliate, BayesLab, Bocconi Institute for Data Science and Analytics (BIDSA).

### Education

2016 - 2021	Ph.D. in Statistics, Bocconi University (Milan, Italy).
	Advisors: Antonio Lijoi and Igor Prünster.
	Thesis: On Complex Dependence Structures in Bayesian Nonparametrics: a Distance-based Approach.
2016 - 2017	Master in Big Data Analytics & Social Mining, University of Pisa and CNR (Italy). Grade: Excellent. Advisor: Paolo Ferragina. Thesis: Information Retrieval on Arpi Dataset.
2012 - 2015	M.Sc. in Mathematics, Sapienza University of Rome (Italy). Grade: 110/110 with honors. Advisors: Domenico Fiorenza and Paolo Papi. Thesis: Planar 2-algebras and Khovanov Homology.
2012 - 2013	Erasmus Program, École Normale Supérieure de Lyon (France).
2009 - 2012	B.Sc. in Mathematics, Sapienza University of Rome (Italy). Grade: 110/110 with honors.

## **Publications**

### ▶ Preprints

- 1. Catalano, M., Lavenant, H., Lijoi, A., Prünster, I. (2021+). A Wasserstein Index of Dependence for Random Measures. Submitted.
- 2. Catalano, M., De Blasi, P., Lijoi, A., Prünster, I. (2021+). Posterior Asymptotics for Boosted Hierarchical Dirichlet Process Mixtures. *Under revision*.

#### ▶ Refereed Journals

- 1. Catalano, M., Lijoi, A., Prünster, I. (2021). Measuring Dependence in the Wasserstein Distance for Bayesian Nonparametric Models. *The Annals of Statistics, forthcoming.* [Winner of the **ASA-SBSS 2021** Student Paper Competition]
- 2. Catalano, M., Lijoi, A., Prünster, I. (2020). Approximation of Bayesian Models for Time-to-event Data. *Electronic Journal of Statistics*, 14, 3366-3395.

### ▷ Conference Proceedings

- 1. Catalano, M., Lijoi, A., Prünster, I. (2020). Transport Distances on Random Vectors of Measures: Recent Advances in Bayesian Nonparametrics. Special Volume of the XV CLAPEM. Birkhäuser, forthcoming.
- 2. Catalano, M., Lijoi, A., Prünster, I. (2019). Bayesian Model Comparison based on Wasserstein Distances. *Book of Short Papers of the Italian Statistical Society*. Pearson.

# Awards and Funding

Apr 2021	IMS New Researcher Travel Award
Jan 2021	ASA-SBSS 2021 Student Paper Competition.
Dec 2020	Research fellowship (2 months), University of Torino.
Nov 2020	Travel grant, WiML workshop co–located with NeurIPS 2020.
Sep 2020	Special financial support (6 months), Bocconi University.
Jun 2019	Travel grant, O'Bayes 2019 conference.
Jun 2019	Travel grant, BNP12 conference.
Sep 2016	Ph.D. scholarship (4 years), Bocconi University.
Apr 2016	Merit-based partial tuition waiver, Pisa University.
2009 - 2012	Excellence path (merit-based additional training activities), Sapienza University.
2009 - 2012	Student award (merit-based 3 years full tuition waiver), Sapienza University.

# Presentations, Conferences and Schools

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$\triangleright$	INVITED	PRESENTATIONS

$\mathrm{Jun}\ 2022$	2022 ISBA 16th World Meeting of the International Society of Bayesian Analysis (Montreal, Canada).
Nov 2021	BIRS-CMO Workshop on Foundations of Objective Bayesian Methodology (Oaxaca, Mexico).
Oct 2021	OxWaSP Annual Workshop (virtual).
$\mathrm{Aug}\ 2021$	Joint Statistical Meeting (Seattle, WA).
$\mathrm{Jun}\ 2021$	2021 ISBA 15th World Meeting of the International Society of Bayesian Analysis (virtual).
$\mathrm{Jun}\ 2021$	EcoSta 2021 4th International Conference on Econometrics and Statistics (virtual).
Apr 2021	One World YoungStatS webinar (virtual).
$\mathrm{Dec}\ 2020$	13th International Conference of the ERCIM WG on Computational and Methodological Statistics (virtual).
Nov 2020	BAYSM:O Bayesian Young Statisticians Meeting: Online (virtual).
Dec 2019	XV CLAPEM 2019 Latin American Congress of Probability and Mathematical Statistics (Mérida, Mexico).
$\mathrm{Jun}\ 2019$	SIS 2019: Smart Statistics for Smart Applications (Milan, Italy).
Jun 2019	Second Italian Meeting on Probability and Mathematical Statistics (Vietri sul Mare, Italy).
▷ Seminars	
Mar 2022	School of Mathematics, Cardiff University (Cardiff, UK).
Nov 2021	Department of Statistics, University of Warwick (Coventry, UK).
Nov 2021	Department of Statistical Science, University College London. (London, UK).
May 2021	Department of Economics, University of Bergamo (Bergamo, Italy, virtual).
Feb 2021	Department of Statistics and Data Science, Cornell University (Ithaca, NY, virtual).

# ▷ CONTRIBUTED PRESENTATIONS

A	Aug 2020	Bernoulli-IMS One World Symposium 2020 (virtual).
⊳ F	POSTERS	
Ι	Dec 2020	15th Women in Machine Learning Workshop co-located with NeurIPS 2020 (virtual).
Ι	Dec 2020	Joint Affinity Groups, NeurIPS 2020 (virtual).
J	un 2019	Objective Bayes Methodology Conference (Warwick, UK).
J	un 2019	12th International Conference on Bayesian Nonparametrics (Oxford, UK).
> S	SCHOOLS	
J	ful 2018	Bocconi Summer School on <i>Graphical models</i> (Como, Italy).
		Instructors: S. Lauritzen (University of Copenhagen) and R. Evans (University of Oxford).
J	ful 2017	Bocconi Summer School on Statistical Causal Learning (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).

# **Teaching**

- ⊳ Module Leader, B.Sc course Bayesian Forecasting and Intervention, University of Warwick (AY 2021/2022)
- ▶ Teaching Assistant, M.Sc. course Numerical and Statistical Methods for Finance, University of Torino (AY 2020/2021).
- ▶ Teaching Assistant, M.Sc. course Data Analysis, Bocconi University (AY 2020/2021, 2019/2020, 2018/2019, 2017/2018).
- ▶ Teaching Assistant, B.Sc. course Mathematics and Statistics, Bocconi University (AY 2018/2019, 2017/2018).

## **Editorial work**

- ▶ Reviewer for Annals of Statistics, Biometrika, Electronic Journal of Statistics, Journal of the American Statistical Association and Statistics & Probability letters.
- ▶ Program Committee Member of the 2021 NeurIPS Workshop Your Model is Wrong: Robustness and misspecification in probabilistic modeling.

# Professional activities

$Jun\ 2021-Present$	Chair, ISBA ad-hoc Committee for Junior Awards.
Jun 2021	Organizing Committee Member, Junior Live Presentations ISBA@CIRM Mirror Workshop
Jan 2021 – Present	Board Member, Young Italian Statistical Society (ySIS).
Dec 2020	Volunteer and Poster Mentor, WiML workshop co–located with NeurIPS 2020.
$Jan\ 2020-Sep\ 2021$	Coordinator, biweekly internal seminar series, BayesLab.
Sep 2019	Volunteer, European Researchers' Night.

## Memberships

Member of the American Statistical Association, Bernoulli Society, Complex Data Modeling Research Network (MiDas), Institute of Mathematical Statistics, International Society for Bayesian Analysis, Italian Statistical Society (SIS).