

Federica Stolf

CONTACT INFORMATION	Department of Statistical Science Duke University 214 Old Chemistry, Durham, NC 27708	✉: federica.stolf@duke.edu web: https://federicastolf.netlify.app
RESEARCH INTERESTS	Applied Bayesian Modeling, Factor models, Bayesian Nonparametrics, Latent Feature Models, Statistical Ecology.	
CURRENT POSITION	Postdoctoral Associate Duke University, Department of Statistical Science (from 10/2024 to present) Advisors: Amy Herring and David Dunson	
EDUCATION	Università degli Studi di Padova , Padova, Italy Ph.D. in Statistics , Department of Statistical Sciences (from 10/2021 to 09/2024, thesis defense 01/2025) <ul style="list-style-type: none">• Thesis Topic: <i>Bayesian methods for complex dependence structures with application in ecology</i>• Advisors: Antonio Canale and David Dunson M.Sc. in Statistical Sciences , Department of Statistical Sciences (from 10/2019 to 09/2021) <ul style="list-style-type: none">• Thesis Topic: <i>Bayesian hierarchical models for spatial extreme values</i>• Advisor: Antonio Canale• Final mark: 110/110 with honors B.Sc. in Statistics for Technology and Sciences , Department of Statistical Sciences (from 10/2016 to 07/2019) <ul style="list-style-type: none">• Thesis Topic: <i>Quantile regression for solar power forecasting</i>• Advisor: Antonio Canale• Final mark: 110/110 with honors	
WORK EXPERIENCE	<ul style="list-style-type: none">• Research support activities (from 03/2021 to 05/2021) Department of Statistical Sciences, Università degli Studi di Padova Supervisor: Prof. Bruno Scarpa• Data scientist intern at Horsa, Vicenza (from 09/2019 to 12/2019)• Ski instructor at Intersport Bernik, Kranjska Gora, Slovenia (from 12/2016 to 2/2020)	
VISITING PERIODS	Duke University, Department of Statistical Science, NC, USA (from 03/2023 to 09/2024) Supervisor: David Dunson.	
AWARDS	Travel & academics awards <ul style="list-style-type: none">• Travel award. BNP14 conference, Los Angeles, US (2025)• ASA-SBSS Student Paper Competition (2025)• Best poster award at ISBA 2024• ISBA travel award. ISBA 2024 world meeting, Venice, Italy• Travel award. 4th Italian Meeting on Probability and Mathematical Statistics (2024)• Best poster award at Autumn school in Bayesian Statistics 2023, CIRM (France)• ISBA travel award. ISBA 2022 world meeting, Montreal, Canada• Mille e una Lode Award 2018/2019, scholarship awarded to the best 3% students of the University of Padova Data competitions <ul style="list-style-type: none">• First prize winner at HackTheGene, Padova (09/2022)	

PUBLICATIONS

Articles in peer-reviewed journals

- Stolf, F. and Dunson, D. (2025). Infinite joint species distribution models. *Biometrika*, to appear [ASA-SBSS student paper award]
- Stolf, F. and Canale, A. (2025). Bayesian Adaptive Tucker Decompositions for Tensor Factorization. *Journal of Computational and Graphical Statistics*, to appear
- Stolf, F. and Canale, A. (2023). A hierarchical Bayesian non-asymptotic extreme value model for spatial data. *Environmetrics*, 34(7), e2806

Discussions and conference proceedings

- Stolf, F. (2025). Dependent Infinite Latent Feature Models for Tree Occurrence Data, in *Methodological and Applied Statistics and Demography IV: SIS 2024, Short Papers*.
- Canale, A., Schiavon, L. and Stolf, F. (2024). Invited discussion to “Sparse Bayesian factor analysis when the number of factors is unknown”. *Bayesian Analysis*, 20(1), 213-344.
- Stolf, F. and Canale, A. (2022). Bayesian spatial modeling of extreme precipitation, in *Proceedings of the 36th International Workshop on Statistical Modelling*. ISBN: 9788855113090

SERVICE TO
PROFESSION

Referee for: Biometrics; Computational Statistics & Data Analysis.

Membership to scientific societies:

- International Society for Bayesian Analysis (ISBA), BNP ISBA and jISBA
- Società Italiana di Statistica (SIS)

Organizer of *Explain like I'm an Undergrad* (from 09/2023 to 07/2024)

Series of weekly seminars for PhD students, post-docs, and young researchers in the statistics department at the University of Padova

PRESENTATIONS

Invited presentations

[Aug 2025] JSM 2025: Joint Statistical Meetings, Nashville, USA

[Dec 2024] CMStats 2024: Computational and Methodological Statistics, London, UK

[Jun 2024] 4th Italian Meeting on Probability and Mathematical Statistics, Rome, Italy

Contributed presentations

[Jun 2025] 14th International Conference on Bayesian Nonparametric, Los Angeles, USA

[Jun 2024] 52th Scientific meeting of the Italian Statistical Society, Bari, Italy

[Nov 2023] BAYSM 2023: Bayesian Young Statisticians Meeting, online

Poster presentations

[Jul 2024] ISBA world meeting 2024, Venice, Italy

[Jun 2024] BAYSM 2024: Bayesian Young Statisticians Meeting, Venice, Italy

[Oct 2023] Autumn school in Bayesian Statistics 2023, CIRM, Marseille, France

[Jul 2022] 36th International Workshop on Statistical Modelling (IWSM), Trieste, Italy

[Jun 2022] ISBA world meeting 2022, Montreal, Canada

TEACHING

Duke University, NC, USA

- Guest lecturer for Bayesian Statistical Modeling and Data Analysis (M.Sc.) - Spring 2025

Università degli Studi di Padova, Padova, Italy

- Teaching assistant for Advanced statistical inference (M.Sc.) - A.Y. 2020/21
- Teaching assistant for Introduction to real analysis (B.Sc.) - A.Y. 2019/20, 2020/21

WORKSHOPS

Selected participant at **Data Research Camp**, Florence (Italy), 07/2024

Four-day meeting where groups of young scholars, advised by a senior researcher, were asked to develop innovative methods and models to analyze a common dataset.