

## Federica Stolf

---

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

## PUBLICATIONS

**Articles in peer-reviewed journals**

- Stolf, F. and Dunson, D. (2025). Infinite joint species distribution models. Submitted, *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.