Davide Agnoletto

Duke University, Department of Statistical Science
214 Old Chemistry, Durham, NC 27708
e-mail: davide.agnoletto@duke.edu

Current position **Postdoctoral Associate** (October 2024 - ongoing)
Department of Statistical Science, Duke University
Mentors: David Dunson, Amy Herring

Research interests Bayesian methodology, predictive Bayesian inference, generalized Bayes.

Education **PhD in Statistics**
(10/2021 – 01/2025)
Department of Statistical Sciences, University of Padova
Thesis title: "Statistical modeling within the generalized Bayesian paradigm".
Supervisors: Bruno Scarpa, Tommaso Rigon, David Dunson

Master's Degree in Statistical Sciences
(10/2019 – 09/2021)
Department of Statistical Sciences, University of Padova
Thesis title: "Analysis of mortality curves: non-parametric density estimation using a Bayesian approach"
Supervisors: Bruno Scarpa, Tommaso Rigon
Final mark: 110/110 *cum laude*

Bachelor's Degree in Statistics for Economics and Business
(10/2016 – 09/2019)
Department of Statistical Sciences, University of Padova
Thesis title: "The use of *All-Resolution Inference* for fMRI images without smoothing"
Supervisor: Livio Finos
Final mark: 110/110 *cum laude*

Awards **Academic**
- *Best Poster award.* ISBA 2024 World Meeting, Venice, IT.
- *"Mille e una Lode" Award 2018/2019* (scholarship awarded to the best 1000 students of the University of Padova).

Data competition
- HackTheGene Hackathon for young Data Scientists, University of Padua, September 2022. 1st place team.
- "Laboratorio di Statistica per le Aziende" 2021, in collaboration with Deloitte. 1st place team.

Travel awards
- *Best poster award.* ISBA 2024 World Meeting, Venice, IT.
- *ISBA travel award ($800).* ISBA 2024 World Meeting, Venice, IT.
- *BNP travel award ($300).* 14th International Conference on Bayesian Nonparametrics (2025), Los Angeles, USA.

Service to profession	**Referee service** • Statistics & Probability Letters.

Service to University

Positions in Boards and Committees
- *Board member of the Department of Statistical Sciences, University of Padova, Italy.* Representation of PhD students and research fellows. 10/2022 – 09/2025.

Pubblications

Submitted and working papers
- Agnoletto, D., Rigon, T., and Dunson D.B. (2025). Nonparametric predictive inference for discrete data via Metropolis-adjusted Dirichlet sequences. *ArXiv*, arXiv:2507.08629.
- Agnoletto, D., Rigon, T., and Dunson D.B. (2025). Bayesian inference for generalized linear models via quasi-posteriors. *Biometrika*, 112(2), asaf022.

National conference proceedings
- Agnoletto, D., Rigon, T., and Dunson, D. B. (2024). Bayesian inference for generalized linear models via quasi-posteriors: an application to Eurasian chaffinch abundance in Finland. *Book of Short Papers of the Italian Statistical Society* (Pollice, A., Mariani, P.) 2024, ISBN:9783031643453.
- Agnoletto, D., Rigon, T. and Scarpa, B. (2023). Bayesian density estimation for modeling age-at-death distribution. *In Book of Short Papers of the Italian Statistical Society* (Chelli, F. M., Ciommi, M., Ingrassia, S., Mariani, F., Recchioni, M.C.) 2023. ISBN: 9788891935618.

Presentations

Contributed presentations

(2025) *14th International Conference on Bayesian Nonparametrics*, Los Angeles, USA.

(2024) *BAYSM 2024: Bayesian Young Statisticians Meeting*, Venice, IT.

(2024) *SIS 2024*, Bari, IT.

(2023) *BAYSM 2023: Bayesian Young Statisticians Meeting*, online.

(2023) *Bayes at CIRM: Autumn school in Bayesian Statistics*, Marseilles, FR.

(2023) *SEAS-IN 2023: Statistical Learning, Sustainability and Impact Evaluation*, Ancona, IT.

Poster presentations

(2024) *ISBA World Meeting*, Venice, IT.

(2022) *Statistical methods and models for complex data: 800 years of research to understand a complex world*, Padova, IT.

Summer schools and workshop

Summer schools and workshops

(2023) *Bayes at CIRM: Autumn school in Bayesian Statistics*, Marseilles, FR.

(2022) *SELECT - Climbing mortality model*, Misurina, IT.

July 14$^{\text{th}}$, 2025