Davide Agnoletto

CONTACT INFORMATION	Department of Statistical Science Duke University 214 Old Chemistry, Durham, NC 27708

✉ : davide.agnoletto@duke.edu
web: https:davideagno.github.io

RESEARCH INTERESTS

Bayesian methodology, Bayesian predictive inference, generalized Bayes.

CURRENT POSITION

Postdoctoral Associate
Duke University, Department of Statistical Science (from 10/2024 to present)
Advisor: 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)

- Thesis title: *Statistical modeling within the generalized Bayesian paradigm*
- Advisors: Bruno Scarpa, Tommaso Rigon, and David Dunson

M.Sc. in Statistical Sciences, Department of Statistical Sciences
(from 10/2019 to 09/2021)

- Thesis title: *Analysis of mortality curves: non-parametric density estimation using a Bayesian approach*
- Advisors: Bruno Scarpa and Tommaso Rigon
- Final mark: 110/110 with honors

B.Sc. in Statistics for Technology and Sciences, Department of Statistical Sciences
(from 10/2016 to 09/2019)

- Thesis title: *The use of All-Resolution Inference for fMRI images without smoothing*
- Advisor: Livio Finos
- Final mark: 110/110 with honors

VISITING PERIODS

Duke University, Department of Statistical Science, NC, USA (from 12/2022 to 09/2024)
Supervisor: David Dunson.

AWARDS

Travel & academics awards

- Travel award. BNP14 conference, Los Angelese, US (2025)
- Best poster award at ISBA 2024
- ISBA travel award. ISBA 2024 world meeting, Venice, Italy
- Mille e una Lode Award 2018/2019, scholarship awarded to the best 3% students of the University of Padova

Data competitions

- First prize winner at HackTheGene, Padova (09/2022)

SERVICE TO PROFESSION

Referee for

- Statistics and Probability Letters.

Membership to scientific societies

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

SERVICE TO UNIVERSITY

Positions in Boards and Committees

- Board member of the Department of Statistical Sciences, University of Padova (from 09/2022 to 09/2024)
  Representation of PhD students and research fellows

PUBLICATIONS   **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.

Articles in peer-reviewed journals

- Agnoletto, D., Rigon, T., and Dunson D.B. (2025). Bayesian inference for generalized linear models via quasi-posteriors. *Biometrika*, 112(2), asaf022.

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   **Summer schools and workshops**
AND WORKSHOPS

(2024) *Data Research Camp*, Florence, IT. Selected participant.
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.

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

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