

CLAUDIA COLLARIN

CONTACT INFORMATION	<p>Department of Environmental Sciences, Informatics and Statistics Ca' Foscari University of Venice Via Torino 155, Mestre-Venezia, 30172, Italy</p> <p>✉ claudia.collarin@unive.it ccollarin</p>
RESEARCH INTERESTS	<p>Generalized Additive Models, Distributional Regression, Survival Analysis, Gradient Boosting, Energy Forecasting</p>
CURRENT POSITION	<p>Postdoctoral Researcher Ca' Foscari University of Venice, Department of Environmental Sciences, Informatics and Statistics (from 01/2025 to present) Advisor: Ilaria Prosdocimi</p>
EDUCATION	<p>University of Padova Ph.D. in Statistics, Department of Statistical Sciences (from 01/2022 to 12/2024, thesis defence 04/2025)</p> <ul style="list-style-type: none">• Thesis topic: <i>Advances in Flexible Statistical Modeling: Feature Engineering, Model Selection and Survival Analysis</i>• Advisors: Bruno Scarpa (University of Padova) and Matteo Fasiolo (University of Bristol) <p>University of Trento M.Sc. in Mathematics, Department of Mathematics (from 10/2019 to 10/2021)</p> <ul style="list-style-type: none">• Thesis topic: <i>Automatic Effect Selection for Generalized Additive Models</i>• Advisors: Claudio Agostinelli (University of Trento) and Matteo Fasiolo (University of Bristol)• Final mark: 110/110 with honours <p>B.Sc. in Mathematics, Department of Mathematics (from 10/2016 to 10/2019)</p> <ul style="list-style-type: none">• Thesis topic: <i>Registrazione di dati funzionali: un metodo fondato sull'analisi delle componenti principali (Functional Data Registration via Principal Component Analysis)</i>• Advisors: Claudio Agostinelli (University of Trento)• Final mark: 110/110
WORK EXPERIENCE	<ul style="list-style-type: none">• Advanced data analytics intern at Sorgenia spa, Milano (from 01/2023 to 12/2023)• Data scientist intern at Bruno Kessler Foundation (FBK) DSIP (from 02/2021 to 06/2021)
VISITING PERIODS	<p>University of Bristol, School of Mathematics, Bristol, UK (from 10/2022 to 12/2022 and from 05/2023 to 08/2023) Supervisor: Matteo Fasiolo</p>

AWARDS

Travel & academics awards

- Best Early-Career Presentation Award. 39th IWSM, Limerick, IRL (2025)

Data competitions

- Top five scoring teams in the EVA Data Challenge, 14th EVA, Chapel Hill, NC (06/2025)
- First prize winner at HackTheGene, Padova (09/2022)

PUBLICATIONS

Discussions and conference proceedings

1. **Collarin, C.**, Fasiolo, M. (2025). GamFactory: An R package for integrating covariate transformations in GAMLSS. In O’Sullivan, D., Sweeney, J., Moghaddam, S., and Burke, K. (Eds.), Proceedings of the 39th International Workshop on Statistical Modelling, Limerick, Ireland 307–311. ISBN 978-1-0369-2711-0.
2. **Collarin, C.**, Fasiolo, M. (2024). Integrating Single Index Effects in Generalized Additive Models. Developments in Statistical Modelling. IWSM 2024. Contributions to Statistics. Springer, Cham., 116–120. https://doi.org/10.1007/978-3-031-65723-8_18.
3. **Collarin, C.**, Fasiolo, M. (2023). Automatic effect selection for generalized additive models. Proceedings of the 37th International Workshop on Statistical Modelling, 400–404. ISBN 978-3-947323-42-5.

Under revision or in preparation

1. **Collarin, C.**, Fasiolo, M., Wood, S., Goude, Y. (2025+). Integrating Complex Covariate Transformations in Generalized Additive Models. [working paper]
2. **Collarin, C.**, Fasiolo, M. (2025+). Creating semi-parametric AFT models via monotonic P-splines. [working paper]
3. **Collarin, C.**, Prosdocimi, I., Girardi, P., Masiol, M. (2025+). Semi-Parametric Analysis of Air Pollutant Trends in the North-Eastern Italian Alps [working paper]
4. Girardi, P., **Collarin, C.**, Prosdocimi, I., Masiol, M. (2025+). A Functional Land Use Regression Model for NO₂ Concentration in the Italian Alpine Region [working paper]

SERVICE TO PROFESSION

Membership to scientific societies:

- Statistical Modelling Society (SMS)
- Società Italiana di Statistica (SIS)

Organizer of *Explain like I’m an Undergrad* (from 01/2023 to 01/2024), series of weekly seminars for Ph.D. students, post-docs, and young researchers in the statistics department at University of Padova.

PRESENTATIONS	Invited presentations
	[Apr 2025] PhD ² ays 2025, Department of Mathematics, University of Milan, IT
	Contributed presentations
	[Jul 2025] 39th International Workshop on Statistical Modelling, Limerick, IRL
	[Jul 2024] 38th International Workshop on Statistical Modelling, Durham, UK
	Poster presentations
	[May 2025] Early-Career Workshop on Nonparametric Statistics, LUISS University, Rome, IT
	[Jul 2023] 37th International Workshop on Statistical Modelling, Dortmund, DE
	[Sept 2022] Statistical methods and models for complex data, Padova, IT
INVITED SEMINARS	<i>Department of Environmental Sciences, Informatics and Statistics</i> , Ca' Foscari University of Venice, (29/01/2025)
TEACHING	University of Padova
	<ul style="list-style-type: none"> • Guest lecturer for “Introduction to Latex” (M.Sc.) - Feb. and Sept. 2024
	University of Trento
	<ul style="list-style-type: none"> • Teaching assistant for Mathematics and Statistics (B.Sc. in Biotechnologies) - A.Y. 2019/20
OTHER	Programming Languages
	R (advanced), Latex (advanced), Python (intermediate), Matlab (basic), C++(basic), Java (basic).
	Languages
	Italian (native), English (fluent).
	Author and/or maintainer of R packages
	gamFactory (co-Author, GitHub)