

# CLAUDIA COLLARIN

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

**AWARDS****Travel & academics awards**

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

**Data competitions**

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

**PUBLICATIONS****Under revision or in preparation**

- Collarin, C.**, & Fasiolo, M. (2025+). *Creating semi-parametric AFT models via monotonic P-splines* [Working paper].
- Collarin, C.**, Prosdocimi, I., Girardi, P., & Masiol, M. (2025+). *Semi-parametric analysis of air pollutant trends in the north-eastern Italian Alps* [Working paper].
- Collarin, C.**, Prosdocimi, I., Girardi, P., & Wood, S. N. (2025+). *Censored Box-Cox Gaussian models* [Working paper].
- Girardi, P., **Collarin, C.**, Prosdocimi, I., & Masiol, M. (2025+). *A functional land use regression model for NO<sub>2</sub> concentration in the Italian Alpine region* [Under review].
- Collarin, Claudia**, Fasiolo, M., Goude, Y., & Wood, S. (2025). Integrating complex covariate transformations in generalized additive models [Working paper]. <https://doi.org/10.48550/arXiv.2511.19234>

**Discussions and conference proceedings**

- Collarin, C.**, & Fasiolo, M. (2025). Gamfactory: An R package for integrating covariate transformations in GAMLS. In D. O'Sullivan, J. Sweeney, S. Moghadam, & K. Burke (Eds.), *Proceedings of the 39th international workshop on statistical modelling* (pp. 307–311).
- Collarin, C.**, & Fasiolo, M. (2024). Integrating single index effects in generalized additive models. In *Developments in statistical modelling. iwsrm 2024* (pp. 116–120). Springer, Cham. [https://doi.org/10.1007/978-3-031-65723-8\\_18](https://doi.org/10.1007/978-3-031-65723-8_18)
- Collarin, C.**, & Fasiolo, M. (2023). Automatic effect selection for generalized additive models. *Proceedings of the 37th International Workshop on Statistical Modelling*, 400–404.

**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	<b>Invited presentations</b>
	[Nov 2025] TRR 391 - TC02 Workshop: Spatio-temporal Statistics in High Dimensions, Dortmund, DE
	[Sept 2025] GRASPA 2025 conference, Rome, IT
	[Apr 2025] PhD <sup>2</sup> ays 2025, Department of Mathematics, University of Milan, IT
<b>Contributed presentations</b>	
	[Jul 2025] 39th International Workshop on Statistical Modelling, Limerick, IRL
	[Jul 2024] 38th International Workshop on Statistical Modelling, Durham, UK
<b>Poster presentations</b>	
	[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, Ca' Foscari University of Venice, (29/01/2025)</i>
TEACHING	<b>University of Padova</b>
	<ul style="list-style-type: none"> <li>• Teaching assistant: Statistics 2 (B.Sc. course in Statistics) A.Y. 2025/2026; University of Padova</li> <li>• Guest lecturer: “Introduction to Latex” (M.Sc.) - Feb. and Sept. 2024</li> <li>• Teaching assistant: Mathematics and Statistics (B.Sc. in Biotechnologies) - A.Y. 2019/20; University of Trento</li> </ul>
OTHER	<b>Programming Languages</b>
	R (advanced), Latex (advanced), Python (intermediate), Matlab (basic), C++(basic), Java (basic).
	<b>Languages</b>
	Italian (native), English (fluent).
	<b>Author and/or maintainer of R packages</b>
	gamFactory (co-Author, <a href="#">GitHub</a> )