# Simone A. Padoan, PhD

Address via Roentgen, 1 Milan, 20136 Email simone.padoan@unibocconi.it

Office 3rd floor, D2-04 Homepage http://mypage.unibocconi.it/simonepadoan/

Nationality Italian Date 10/12/2024

### **Current Academic Position**

2020-Present Associate Professor

Department of Decision Sciences, Bocconi University, Milan, Italy

2020-Present Research Fellow

Euro-Mediterranean Center on Climate Change (CMCC), Lecce, Italy

#### **Past Academic Positions**

2012-2020 Assistant Professor

Department of Decision Sciences, Bocconi University, Milan, Italy

2011-2012 Senior Researcher

Department of Statistical Sciences, University of Padua, Italy

**2008-2010 Post-Doctoral Researcher** (CCES project, Prof. A. C. Davison)

École Polytechnique Fédérale de Lausanne (EPFL), Switzerland

#### **Education**

2008 PhD in Statistical Sciences

PhD school of Statistical Sciences, University of Padua, Italy

Supervisor: Prof. Stuart G. Coles

2004 MSc in Statistics and Information Technology

Faculty of Statistical Sciences, University of Padua, Italy

#### **Honours and Awards**

2024 Elected member

**International Statistical Institute** 

**Excellence in Research Award** 

Bocconi University, Milan, Italy

2016 Excellence in Research Award

Bocconi University, Milan, Italy

2007 Best Student Presentation Award, first prize

Conference TIES 2007, The International Environmetrics Society, Mikulov, Czech Republic

# **Fellowship**

2018 Qualification of Full Professor (sector 13/D1)

Italian Minister of Education, University and Research

2016 Research Fellow, BIDSA research center, Bocconi University, Milan, Italy
 2021 Research Fellow, GREEN research center, Bocconi University, Milan, Italy

**2023** Research Fellow, Institute for European Policymaking, Bocconi University, Milan, Italy

#### **Publications**

#### **Articles in Refereed Journals**

- 1. Pacifici, C., Padoan, S. A. and Mysiak, J. (2025). Predicting hazards of climate extremes: a statistical perspective. Journal of Royal Statistical Society, Series C, accepted, see https://arxiv.org/abs/2505.17622
- 2. Daouia A., **Padoan**, **S. A.** and Stupfler, G. (2024). Extreme Expectile Estimation for Short-tailed Data with an Application to Market Risks. **Journal of Econometrics**, **241**(2), 1–18
- 3. **Padoan, S. A.** and Rizzelli, S. (2024). Empirical Bayes Inference for the Block Maxima Method. **Bernoulli, 30**(3), 2154-2184.
- 4. **Padoan, S. A.** and Rizzelli, S. (2024). Strong Convergence of Peaks Over a Threshold. **Journal of Applied Probability, 61**(2), 529-539.
- 5. Daouia, A., Padoan, S. A. and Stupfler, G. (2024). Optimal Pooling and Distributed Inference for the Tail Index and Extreme Quantiles. **Bernoulli, 30**(2), 1287-1312.
- 6. Davison, A. C., **Padoan, S. A.** and Stupfler, G. (2023). Tail Risk Inference via Expectiles in Heavy-tailed Time Series. **Journal of Business & Economic Statistics 41**(3), 876-889.
- 7. **Padoan, S. A.** and Rizzelli, S. (2022). Consistency of Bayesian Inference for Multivariate Max-stable Distributions. **Annals of Statistics, 50**(3) 1490-1518.
- 8. **Padoan, S. A.** and Stupfler, G. (2022). Joint Inference on Extreme Expectiles for Multivariate Heavy-tailed Distributions. **Bernoulli, 28**(2), 1021-1048.
- 9. Drouet, L., Bosetti, V., Padoan, S. A. et al. (2021). Net Zero Emission Pathways Reduce the Physical and Economic Risks of Climate Change. Nature Climate Change, 11, 1070–1076.
- 10. Hashorva, E., **Padoan, S. A.** and Rizzelli, S. (2021). Multivariate Extremes Over a Random Number of Observations. **Scandinavian Journal of Statistics, 48(3)**, 845-880.
- 11. Beranger, B., **Padoan, S. A.** and Sisson, S. A. (2021). Estimation and Uncertainty Quantification for Extreme Quantile Regions. **Extremes, 24**, 349-375.
- 12. Falk, M., Padoan, S. A. and Rizzelli, S. (2020). Strong Convergence of Multivariate Maxima. Journal of Applied Probability, 57, 314-331.
- 13. Falk, M., Khorrami, A. and **Padoan, S. A.** (2020). Records for Time-Dependent Stationary Gaussian Sequences. **Journal of Applied Probability, 57**, 78-96.
- 14. Falk, M., **Padoan, S. A.** and Wisheckel, F. (2019). Generalized Pareto Copulas: a Key to Multivariate Extremes. **Journal of Multivariate Analysis, 174,** 104538.
- 15. Beranger, B., Padoan, S. A., Xu, Y. and Sisson, S. A. (2019). Extremal Properties of the Multivariate Extended Skew-Normal Distribution. Statistics and Probability Letters, 147, 105–114.
- 16. Falk, M., **Padoan, S. A.** and Wisheckel, F. (2019). Conditional Tail Independence in Archimedean Copula Models. **Journal of Applied Probability**, 56(3), 858-869.
- 17. Beranger, A., Padoan, S. A., Xu, Y. and Sisson, S. A. (2019). Extremal Properties of the Univariate Extended Skew-normal Distribution. **Statistics and Probability Letters**, **147**, 73–82.
- 18. Guillou, A., **Padoan, S. A.** and Rizzelli, S. (2018). Inference for Asymptotically Independent Sample of Extremes. **Journal of Multivariate Analysis, 167**, 114–135.
- 19. Falk, M., Khorrami, A. and Padoan, S. A. (2018). Some Results on Joint Record Events. Statistics and Probability Letters, 135, 11–19.

- 20. Falk, M., Khorrami, A. and **Padoan, S. A.** (2018). On Multivariate Records from Random Vectors with Independent Components. **Journal of Applied Probability**, **55**(1), 43–53.
- 21. Beranger, B., **Padoan, S.A.** and S. A. Sisson (2017). Models for Extremal Dependence Derived from Skew-Symmetric Families. **Scandinavian Journal of Statistics**, **44**, 21–45.
- 22. Marcon, G., Padoan, S. A., Naveau P., Muliere P. and J. Segers (2017). Multivariate Nonparametric Estimation of the Pickands Dependence Function using Bernstein Polynomials. **Journal of Statistical Planning and Inference**, **183**, 1–17.
- 23. Marcon, G., Naveau P. and **Padoan, S. A.** (2017). A Semi-Parametric Stochastic Generator for Bivariate Extreme Events. **Stat, 6**, 184–201.
- 24. Marcon, G., **Padoan, S. A.** and Antoniano-Villalobos, I. (2016). Bayesian Inference for the Extremal Dependence. **Electronic Journal of Statistics, 10**, 3310–3337.
- 25. Genton, M. G., Padoan, S. A. and Sang, H. (2015). Multivariate Max-Stable Spatial Processes. Biometrika, 102(1), 215–230.
- 26. **Padoan, S. A.** and Bevilacqua, M. (2015) Analysis of Random Fields with CompRandFld. **Journal of Statistical Software, 63**, 1–27.
- 27. Padoan, S. A. (2013). Extreme Dependence Models Based on Event Magnitude. Journal of Multivariate Analysis, 122, 1–19.
- 28. Davison, A. C., **Padoan, S. A.** and Ribatet, M. (2012). Statistical Modelling of Spatial Extremes, with discussion. **Statistical Science**, **27**(2), 161–186.
- 29. Wand, M. P., Ormerod, J. T., **Padoan, S. A.** and Frührwirth, R. (2011). Mean Field Variational Bayes for Elaborate Distributions. **Bayesian Analysis, 6**(4), 847–900.
- 30. **Padoan, S. A.** (2011). Multivariate Extreme Models Based on Underlying Skew-t and Skew-Normal Distributions. **Journal of Multivariate Analysis, 102**, 977–991.
- 31. Simoni, S., **Padoan, S. A.**, Nadeau, D. F., Diebold, M., Porporato, A., Barrenetxea, G., Ingelrest, F., Vetterli, M., and Parlange, M. B. (2011). Hydrologic Response of an Alpine Watershed: Application of a Meteorological Wireless Sensor Network to Understand Streamflow Generation. **Water Resources Research**, **47**(W10524), 1–16.
- 32. **Padoan, S. A.**, Ribatet, M. and Sisson, S. A. (2010). Likelihood-based Inference for Max-Stable Processes. **Journal of the American Statistical Association, Theory & Methods, 105**, 263–277.
- 33. **Padoan, S. A.** and Wand, M. P. (2008). Mixed Model-Based Additive Models for Sample Extremes. **Statistics and Probability Letters, 78**, 2850–2858.

#### **Books, Monographs and Book Chapters**

- 34. Levin, D. C., **Padoan, S. A.** and Stefano Rizzelli (2024). *Measures of extremal dependence*, pages xx-xx, chapter of the book: "Handbook on Statistics of Extremes", Edited by Miguel de Carvalho, Raphael Huser, Philippe Neveau and Brian J. Reich, **Chapman Hall/CRC**.
- 35. Beranger, B. and **Padoan, S. A.** (2015). *Extreme Dependence Models*, pages 325-352, chapter of the book: "Extreme value Modeling and Risk Analysis: Methods and Applications", Edited by Dipak K and Jun Yan, **Chapman Hall/CRC**.
- 36. Padoan S. A. (2013) *Max-Stable Processes*, in Encyclopedia of Environmetrics, A. -H. El-Shaarawi and W. Piegorsch (eds), John Wiley & Sons Ltd: Chichester, UK. DOI:10.1002/9780470057339.vnn022. Published online 1/15/2013.
- 37. **Padoan S. A.** (2013) *Extreme Value Analysis*, in **Encyclopedia of Environmetrics**, A. -H. El-Shaarawi and W. Piegorsch (eds), John Wiley & Sons Ltd: Chichester, UK. DOI:10.1002/9780470057339.vae061.pub2. Published online 1/15/2013.
- 38. **Padoan S. A.** (2008) *Computational Methods for Complex Problems in Extreme Value Theory*, PhD thesis, University of Padua. http://paduaresearch.cab.unipd.it/1047/.

#### **Conference Proceedings, Notes and Discussions**

- 39. Gaetan, C., **Padoan, S. A.** and Prunster, I. (2016). Comment on the article "Spatial Product Partition Models" by Page, G. L. and Quintana, F. A. **Bayesian Analysis**, **11**(1), 307-314 (invited discussion).
- 40. Padoan, S. A. (2011). Valori Estremi e Analisi dei Rischi Ambientali. Sis-Magazine Online Magazine of the Italian Statistics Society (Società Italiana di Statistica), http://www.sis-statistica.it/magazine/spip.php?article199.
- 41. **Padoan, S. A.** and Fassó, A. (2011). Multivariate and Apatial Extremes for the Analysis of Air Quality Data. Proceedings of **Spatial 2**, Spatial Data Methods for Environmental and Ecological Processes 2nd Edition, Foggia, Sept. 1–2, 2011. Printed in Graspa WP, www.graspa.org, ISSN: 2037-7738.

#### **Submitted Papers**

- 42. Levin, D. C., Padoan, S. A. and Rizzelli S. (2025). Asymptotic theory for the likelihood-based block maxima method in time series. *Under Revision*. See https://arxiv.org/abs/2506.17448
- 43. Levin, D. C., Padoan, S. A. and Rizzelli S. (2025). Accurate Bayesian inference for tail risk extrapolation in time series. *Under Revision*. See https://arxiv.org/abs/2510.14637
- 44. Beranger, B. and Padoan, S. A. (2025). ExtremalDep: Modelling extremal dependence in high dimensional extremes. *Under Revision*. See https://arxiv.org/abs/2412.13453.
- 45. **Padoan, S. A.** and Rizzelli, S. (2025). **Statistical Prediction of Peaks Over a Threshold**. *Under Revision*. See https://arxiv.org/abs/2311.11852.
- 46. Dombry, C., Padoan, S. A. and Rizzelli, S. (2025). Asymptotic Theory for Bayesian Inference and Prediction: from the Ordinary to a Conditional Peaks-Over-Threshold Method. *Under Revision*. See https://arxiv.org/pdf/2310.06720.
- 47. Padoan, S. A., Rizzelli, S. and Schiavone, M. (2025). Marginal Expected Shortfall Inference Under Multivariate Regular Variation. *Under Revision*. See https://arxiv.org/abs/2304.07578.

#### **Preprint**

48. Falk, M., Khorrami, A. and Padoan, S. A. (2019). Records for Some Stationary Dependent Sequences. See http://arxiv.org/abs/1807.00337.

#### **Software**

1. R package **CompRandFld** (Composite Likelihood for Random Fields). Available in The Comprehensive R Archive Network, at the address: https://CRAN.R-project.org/package=CompRandFld.

**Description**: Procedures for the analysis of random fields using likelihood and non-standard likelihood methods. Spatial analysis often involves dealing with large datasets. So, even simple studies may be computationally demanding. Composite likelihood inference is emerging as a useful tool for mitigating such computational problems. This methodology shows satisfactory results when compared with other techniques such as apering. Moreover, composite likelihood (and related quantities) have some useful properties similar to those of the standard likelihood.

2. R package **ExtremalDep** (Extremal Dependence).

Available in The Comprehensive R Archive Network, at the address: hhttps://CRAN.R-project.org/package=ExtremalDep.

**Description**: Procedures for modelling parametrically and non-parametrically the dependence structure of multivariate extreme-values. Statistical inference is performed with non-parametric estimators, likelihood-based estimators and Bayesian techniques.

3. R package ExtremeRisks (Extreme Risk Measures).

Available in The Comprehensive R Archive Network, at the address: hhttps://CRAN.R-project.org/package=ExtremeRisks.

**Description**: Procedures for estimating risks related to extreme events via risk measures such as expectiles, value-at-risk, etc. Estimation methods for univariate independent observations and temporal dependent observations are available. Statistical inference is performed through parametric and non-parametric estimators. Inferential procedures such as confidence intervals and hypothesis testing are obtained by exploiting the asymptotic theory.

#### **Citation Counts for Statistics Publications**

| Publications   | times cited |
|--|-------------|
| Davison, Padoan & Ribatet (2012), Statistical Science                            | 793         |
| Padoan, Ribatet & Sisson (2010), Journal of the American Statistical Association | 526         |
| Wand et al. (2011), Bayesian Analysis  | 246         |
| Drouet, Bosetti, Padoan, et all (2021), Nature Climate Change                    | 111         |
| Marcon et al. (2017), Journal of Statistical Planning and Inference              | 80          |
| Simoni et al. (2011), Water Resources Research                                   | 66          |
| Padoan (2011), Journal of Multivariate Analysis                                  | 60          |
| Genton, Padoan & Sang (2015), Biometrika   | 52          |
| Padoan & Bevilacqua (2015), Journal of Statistical Software                      | 47          |
| Padoan & Wand (2008), Statistics and Probability Letters                         | 38          |
| Davison, Padoan and Stupfler (2023), Journal of Business & Economic Statistics   | 36          |
| Padoan (2013), Journal of Multivariate Analysis                                  | 29          |
| Falk et al. (2019), Journal of Multivariate Analysis                             | 22          |
| Marcon et al. (2016), Electronic Journal of Statistics                           | 21          |
| Beranger, Padoan & Sisson (2016), Scandinavian Journal of Statistics             | 19          |
| Beranger & Padoan (2016), Chapman Hall/CRC                                       | 18          |
| Padoan and Stupfler (2022), Bernoulli  | 17          |
| <b>⋮</b>   | :           |
| Total  | 2365        |

H-Index 17, \*Source from Google Scholar (citations) on date 23/05/2025.

#### **Research Interests**

Extreme Value Theory, Time series, Spatial Statistics, Applied Probability, Nonparametric Statistics, Likelihood-based Inference, Bayesian Statistics.

# **Successful Grant Applications**

- 1) Grant 2025-2026, **EVT for Extreme Events Attribution**. Principal investigator. Bocconi senior researchers' grants competition funded by "Romeo ed Enrica Invernizzi Foundation"
- 2) Grant 2024-2025, **Probabilistic Forecasting of Tail Events**. Principal investigator. Bocconi senior researchers' grants competition funded by "Romeo ed Enrica Invernizzi Foundation"
- 3) PRIN 2022 grant, Research Project 2022–2025: **Uncertainty and tail risks**. Member of the Bocconi unit. National coordinator: Prof. Massimiliano Marcellino, Bocconi University, Italy
- 4) Grant 2022-2025, **Multi-hazard and systemic framework for enhancing risk-informed management and decision-making in the E.U.**, funded by the European Commission under the Horizon 2020 programme. Member of the RAAS division of CMCC
- 5) Grant 2021-2022, **Machine Learning Inference for Areal Risk Quantification**. Principal investigator. Bocconi senior researchers' grants competition funded by "Romeo ed Enrica Invernizzi Foundation"
- $\bullet$  6) Grant 2020-2021, **Sectoral Information System to Support Disaster Risk Reduction**, founded within the ECMWF COPERNICUS Procurement program. Member of the RAAS division of CMCC

- 7) PRIN 2015 grant, Research Project 2016–2019: **Modern Bayesian Nonparametric Methods**. Member of the Milan unit. National coordinator: Igor Prünster, Bocconi University, Italy
- 8) Grant 2011-2013, **Multivariate and Spatial Extremes**. Principal investigator, Research founded by the support of innovation and excellent research plans for young researchers, University of Padua, Italy

#### **Research Visits**

- 27 May 1 Jun 2019, Erasmus University Rotterdam, The Netherlands
- 13 23 May 2019, *University of Strasbourg*, France
- 7 13 Apr and 3–8 June 2019, *University of Nottingham*, UK
- 15 Oct 10 Dec 2018, *University of Würzburg*, Germany
- 15 19 Feb 2016 and 13–17 Feb 2017, Université de Lausanne, Switzerland
- 24 31 Oct 2011, University of Newcastle, UK
- 20 Jul 31 Aug 2009, *University of Wollongong*, Australia
- 1 31 Jul 2008, University Jaume I, Castellón, Spain
- 1 Feb 2006 1 Aug 2007, *University of New South Wales*, Australia.

### Presentations, Seminars, Dissemination and Conference Organization

#### **Invited Talks to International Conferences**

I have been invited to give a presentation to 36 international conferences/workshops: 36) The 2026 ISBA World Meeting, Nagoya, Japan; 35) The 5th Italian Meeting on Probability and Mathematical Statistics, Palermo, Italy; 34) The International Symposium on Nonparametric Statistics, Thessaloniki, Greece; 33) Joint Meeting of The 13th Days of Econometrics for Finance and The Workshop on Recent Advances in Extreme Value Analysis. Toulouse School of Economics in Rabat, Marocco; 32) 19th International Joint Conference CFE-CMStatistics, University of London, UK;. 31) 2025 workshops on "advanced statistical methods for emerging applications in network analysis, healthcare and finance", Imperial College London, London, UK. 30) 2025, EVA 2025: Conference on Extreme Value Analysis, University of North Carolina at Chapel Hill, US; 29) Intersecting Climate Science and Geostatistics: A Conference on Spatio-Temporal Interpolation, Joint Research Center, Ispra, Italy; 28) 2024, 7th Conference on Econometrics and Statistics, China; 27) 2023, 16th International Joint Conference CFE-CMStatistics, Germany; 26) 2023, workshop COSMOSTATS, Asiago Observatory, Italy; 25) 2023, 6th Conference on Econometrics and Statistics, Japan; 24) 2022, CIRM Workshop on Heavy Tails, Long-Range Dependence, and Beyond, Luminy, France; 23) 2022, 5th Conference on Econometrics and Statistics, Japan; 22) 2021, ISI World Statistics Congress, virtual conference; 21) 2021 13th Conference on Extreme Value Analysis, Probabilistic and Statistical Models and their Applications, UK; 20) 2021, 4th Conference on Econometrics and Statistics, China; 19) 2020, 13th International Joint Conference CFE-CMStatistics, UK; 18) 2019, 12th International Joint Conference CFE-CMStatistics, UK; 17) 2018, European Meeting of Statisticians, Italy; 16) 2019, Second Italian Meeting of Probability and Mathematical Statistics, Italy; 15) 2018, 11th International Joint Conference CFE-CMStatistics, Italy; 14) 2018, 4th Conference of the International Society for Nonparametric Statistics, Italy; 13) 2017 10th International Joint Conference CFE-CMStatistics, UK; 12) 2017 39th Conference of Stochastic Processes and Applications, Russia; 111) 2016, 22nd International Conference of Computational Statistics, Spain; 10) 2016, Workshop Uncertainty and Causality Assessment in Modeling Extreme and Rare Events, US; 9) 2015, 60th World Statistics Congress ISI, Brasil; 8) 2015, 9th Conference of Extreme Value Analysis 2015, Ann Arbour, US; 7) 2014, Workshop on Spatial Statistics for Environmental and Energy Challenges, Saudi Arabia; 6) 2013, EVT2013 Extremes in Vimiero Today. Workshop in honor of Ivette Gomes, Portugal; 5) 2012, BIRS Composite Likelihood Workshop, Banff center, Canada; 4) 2011, 3rd Nordic-Baltic Biometric Conference, Finland; 3) 2011, IV Skew Workshop, Probabilistic and Inferential Aspects of Skew-Symmetric Models, Chile; 2) 2010, International Symposium on Business and Industrial Statistics, Slovenia; 1) 2009, 20th Annual Conference of The International Environmetrics Society, Italy.

#### **Invited Seminars at Universities**

I have been invited to give seminars at 20 universities: 20) 2026 Department of Economic, Venice University, Venice, Italy; 19) 2025, Department of Statistics, Columbia University, New York, US. 18) 2025, Department of Mathematics, Karlsruhe Institute of Technology, Karlsruhe, Germany; 17) 2025, School of Operations Research and Information Engineering, Cornell University, Ithaca, US; 16) 2025, School of Economics, Erasmus

University Rotterdam, Netherlands; 15) 2025, School of Business and Economics, University of Amsterdam, Netherlands; 14) 2024, Department of Mathematics, KU Leuven, Belgium; 13) 2024, Département de Sciences Actuarielles, Université de Lausanne, Switzerland; 12) 2024, Department of Statistics, University of Bologna, Italy; 11) 2023, International One-World-Extremes seminar series; 10) 2023, Department of Mathematics, University of Angers, France; 9) 2021, EPFL, Switzerland; 8) 2020, School of Mathematics and Statistics, UNSW, Australia; 7) 2018, Würzburger Mathematisches Kolloquium, Universität Würzburg, Germany; 6) 2018, Institute for Mathematical Stochastics in Göttingen, Germany; 5) 2017, Laboratoire de Statistique Théorique et Appliquée, Université Pierre et Marie Curie, France; 4) 2016, Département de Sciences Actuarielles, Université de Lausanne, Switzerland; 3) 2015, Laboratoire de Statistique Théorique et Appliquée, Université Pierre et Marie Curie, France; 2) 2011, Department of Information Technology and Mathematical Methods, University of Bergamo, Italy; 1) 2009, Université Claude Bernard Lyon I, France.

#### **Scientific Dissemination**

• Since 2023: Invited by the European Environment Agency (EEA) to present at the annual "Expert Meeting on Economic Losses from Weather- and Climate-Related Extremes", sharing research outcomes from the collaboration between the EEA and the "Centro Euro-Mediterraneo sui Cambiamenti Climatici" (CMCC), where I serve as a research fellow. Provided talks: 1) 2025, "Insights from in-depth statistical analysis"; 2) 2024, "Statistical analysis of the disaster losses: A tail probabilistic forecasting approach"; 3) 2023, "Analysis of annual impacts due to critical atmospheric conditions".

#### **Organizer of Conference**

- 2023, Local and scientific organizer of the **13th Conference on Extreme Value Analysis, Probabilistic and Statistical Models and their Applications**, number of participants: 400, Bocconi University, Italy.
- Member of Scientific Program Committee of the CFE-CMStatistics International Conference.

### Organizer of Sessions and Chair of Sessions

I have been the organiser of 8 sessions at international conference: 1) 2020, *Estimation methods for extreme events*, the 13th ERCIM WG on CMStatistics, UK; 2) 2018 *Extremal Dependence Modelling*, the 11th International Conference on Extreme Value Analysis, Croatia; 3) 2018 *Recent Advances on Extreme Value Theory*, the 49th Scientific meeting of the Italian Statistical Society, Italy; 4) 2017 *Stochastic Processes and Extremes*, the 10th ERCIM WG on CMStatistics, UK; 5) 2016 *Bayesian Modelling and Inference of Extreme Events*, the International Society for Bayesian Analysis, Italy; 6) 2015 *Stochastic Processes with Applications*, the 8th ERCIM WG on CMStatistics, UK; 7) 2014 *Extremes of Dependence Sequences*, the 47th Scientific Meeting of the Italian Statistical Society, Italy; 8) 2014 *Statistical Methods for Modelling Spatio-Temporal Random Fields*, the 8th ERCIM WG on CMStatistics, UK

I have been chairs of 4 sessions at international conferences: 1) 2021, *Spatial Extremes (I)*, the 12th International Conference on Extreme Value Analysis, UK; 2) 2018, *Nonparametric Models for Spatio-Temporal Data*, the 4th Conference of the International Society for Nonparametric Statistic, Italy.; 3) 2016 *Bayesian Nonparametrics*, 22nd International Conference on Computational Statistics, Spain; 4)2015 *Tail Dependence*, the 9th International Conference on Extreme Value Analysis, US.

# **Editorial Activity & Institutional Responsibilities**

#### **Associate Editor**

- Journal of the Royal Statistical Society, Series B (2025 Present)
- Statistics and Probability Letters (2025 Present)
- Journal of Statistical Planning and Inference (2022 Present)
- Stochastic Models (2019 Present)
- Extremes (2019 Present)

#### **Member of International Committees**

• 2020 – 2021, IMS Committee Equality and Diversity

#### **Member of Doctoral Committees**

- 2024, Ecole Polytechnique Fédérale de Lausanne, Switzerland. Candidate: Sonia Alouini.
- 2023, University of Padua, Italy. Candidate: Nicola Bianco
- 2022, Bocconi University, Italy. Candidates: Beatrice Franzolini and Marta Bonsaglio
- 2021, Bocconi University, Italy. Candidate: Augusto Fasano
- 2020, Bocconi University, Italy. Candidate: Andrea Arfè
- 2019, Ecole Polytechnique Fédérale de Lausanne, Switzerland. Candidate: Claudio Semadeni
- 2019, University of Greenwich, UK. Candidate: Andrew Garthwaite
- 2014, Swiss Italian University, Switzerland. Candidate: Olga Kaiser

#### **Local Administrative Duties**

- 2013 present, Council member of the PhD in Statistics, Bocconi University, Italy
- 2012 2015, Organizer of the Statistical Seminar Series, Bocconi University, Italy
- 2015 2017, Member of the committee for junior hiring, Bocconi University, Italy
- 2013 present, Member of the teaching committee for the master degree in "*Economics & Management of Government & International Organizations*", Bocconi University, Italy
- 2019 present, Member of the teaching committee for the bachelor of science degree in "*Economics and Social Sciences*" Bocconi University, Italy

#### **Peer Reviewer for Scientific Journals**

Journal of American Statistical Association; Journal of the Royal Statistical Society (Series B); Biometrika; Bernoulli; Scandinavian Journal of Statistics; Journal of Multivariate Analysis; Annals of Applied Statistics; Statistics and Probability Letters; Extremes; Bayesian Analysis; Journal of Statistical Software; Statistics and Computing; Computational Statistics & Data Analysis; Journal of Computational and Graphical Statistics; Biometrics; Spatial Statistics; Environmetrics; Applied Statistics; Stochastic Environmental Research and Risk Assessment; Water Resources Research; European Journal of Operational Research; Metron.

### Postdocs and PhD, Masters and Undergraduate Students

#### **Postdocs and PhD Students**

I am currently supervisor of 1 postdoc and 3 PhD students: 1) Carlotta Pacifici, Bocconi University. Project: *PRIN 2022 "Uncertainty and tail risks"*; 2) Matteo Schiavone, 2023-2026, PhD in Statistical Science, Padua University. Thesis: *High Dimensional Risk Measures Under Multivariate Regular Variation*; 3) David Levin Carl, 2022-2026, PhD in Statistics, Bocconi University. Thesis: *Estimation of the Extreme Cluster Size*; 4) Pietro Scanzi, 2022-2026, PhD in Statistics, Bocconi University. Thesis: *Bootstrap for Extremes*.

I have been supervisor of 4 PhD students: 1) Stefano Rizzelli (now assistant professor at Padua University Italy), 2016-2019, PhD in Statistics, Bocconi University. Thesis: *Asymptotic Properties of Nonparametric and Semiparametric Statistical Methods for the Extremal Dependence*, 2) Amir Khorrami (now assistant professor at Cagliari University Italy), 2016-2019, PhD in Statistics, Bocconi University. Thesis: *New Advances on Records*, 3) Boris Beranger (now Lecturer at UNSW Australia), 2013-2015, PhD program in Statistics, University of Paris 6 Pierre et Marie Curie (co-supervisors Michel Broniatowski, Scott Sisson). Thesis: *Modelling the Dependence Structure of Multivariate and Spatial Extremes*, 4) Giulia Marcon (now assistant professor at Palermo University Italy), 2012-2015, PhD in Statistics, Bocconi University. Thesis: *Non-parametric Methods for Estimating the Dependence of Extreme Values*.

### **Masters and Undergraduate Students**

I have been supervisor of 18 Master students: 1); Vittorio Garavelli, Bocconi University; 2) Filippo Gombac, 2025, Bocconi University; 3) Lia Yuan, 2025, Bocconi University; 4) Elena Paglierani, 2025, Bocconi University; 5) Yu Chen, 2024, Bocconi University; 6) Gaia Vaccarezza, 2023, Bocconi University; 7) Andrea Teruzzi,

2023, Bocconi University; 8) Pietro Scanzi, 2022, Padua University; 9) Matteo Schiavone, 2022, Bocconi University; 10) Vishal Murmu, 2020, Bocconi University; 11) Nicola Rogante, 2020, Bocconi University; 12) Filippo Deserti, 2017, Bocconi University; 13) Fabio D'Andrea, Bocconi University; 14) Wulf-Carl Mosburger, 2015, Bocconi University; 15) Francesco Morino, 2014, Bocconi University; 16) Amir Korrami, 2013, Polytechnic University of Turin; 17) Giovanni Aiello, 2013, Bocconi University; 18) Dario Plebani, 2011, University of Bergamo.

## **Teaching Activities**

- 2013 present, **Director of the PhD** course in *Statistics of Extremes*, Bocconi University, Italy
- 2012 present, **Director of the master** course in *Quantitative Methods for Social Sciences*, Bocconi University, Italy
- 2019 present, Director of the undergraduate course in Statistics II, Bocconi University, Italy
- 2012 2018, Lecturer of the undergraduate course in Statistics I, Bocconi University, Italy

# **Society Memberships**

Institute of Mathematical Statistics, Bernoulli, International Statistical Institute, International Environmetrics Society (TIES), Italian Statistical Society, GRASPA (Gruppo di Ricerca per le Applicazioni della Statistica ai Problemi Ambientali).