

CV

Name

Sandra Fortini

Education

Master of Science in Applied Stochastic Systems
University College of London 1993

Degree in Mathematics
Università degli Studi di Milano 1989

Previous positions

CNR Institute for the Applications of Mathematics and Informatics
Researcher 1990 – 1994

Main publications

- “Infinite-color randomly reinforced urns with dominant colors”
Sariev, H., Fortini, S. and Petrone, S. 2021
<https://arxiv.org/abs/2106.04307>
- “Approximating the Operating Characteristics of Bayesian Uncertainty Directed Trial Designs”
Bonsaglio, M., Fortini, S., Venz, S. and trippa, L. 2021
<https://arxiv.org/abs/2105.11177>.
- “Infinite-channel deep stable convolutional neural networks”
Bracale, D., Favaro, S., Fortini, S. and Peluchetti, S. 2021
<https://arxiv.org/abs/2102.03739>
- “Large-width functional asymptotics for deep Gaussian neural networks”
Bracale, D., Favaro, S., Fortini, S. and Peluchetti, S.
International Conference on Learning Representations, 2021
<https://openreview.net/pdf?id=0aW6lYOYB7d>
- “Stable behaviour of infinitely wide deep neural networks” Favaro S., Fortini, S. and Peluchetti, S. *Proceedings of the 23rd International Conference on Artificial Intelligence and Statistics*. PMLR 108:1137-1146. 2020.
<http://proceedings.mlr.press/v108/peluchetti20b/peluchetti20b.pdf>
- “Quasi-Bayes properties of a procedure for sequential learning in mixture models” Fortini, S. and Petrone S. *Journal of the Royal Statistical Society B*, 82(4), 1087-1114. 2020
<https://rss.onlinelibrary.wiley.com/doi/abs/10.1111/rssb.12385>

- "On a notion of partially conditionally identically distributed sequences" Fortini, S., Petrone S. and Sporysheva P. *Stochastic Processes and their Applications*. 128(3), 727- 1072.
<https://www.sciencedirect.com/science/article/abs/pii/S0304414917301631>
- "Predictive Characterization of Mixtures of Markov Chains" Fortini, S. and Petrone S. *Bernoulli Journal* 23(3), 1538-1565. 2017
<http://dx.doi.org/10.3150/15-BEJ787>
- "Predictive distribution (de Finetti's view)" Fortini, S. and Petrone S. *Statsref-Statistics Reference Online*. Wiley. DOI: 10.1002/9781118445112.stat07831. 2016
<http://onlinelibrary.wiley.com/doi/10.1002/9781118445112.stat07831/abstract>
- "Hierarchical reinforced urn processes" Fortini, S. and Petrone S. *Stat. Prob. Lett* 82, 1521 - 1529. 2012
<http://www.sciencedirect.com/science/article/pii/S0167715212001551>
- "Predictive construction of priors in Bayesian nonparametrics" Fortini, S. and Petrone S. *Braz. J. Probab. Stat.* 6,4,423 - 449. 2012
<https://projecteuclid.org/euclid.bjps/1341320251>
- "Central Limit Theorem with Exchangeable Summands and Mixtures of Stable Laws as Limits" Fortini, S., Ladelli L, Regazzini, E. *BUMI* 5,3, 515 - 542. 2012
<https://arxiv.org/abs/1204.4357>
- "Recursive Equations for the predictive distributions of some determinantal processes" with Cifarelli D.M. and Fortini, S. *Stat. Prob. Lett.* 81, 8-15. 2011
<http://www.sciencedirect.com/science/article/pii/S0167715210002622>
- "A Poisson Approximation for Colored Graphs Under Exchangeability" Fortini, S. and Cerquetti A. *Sankhya A* 68 183-197. 2006
<https://www.jstor.org/stable/25053492>
- "A characterization for mixtures of Semi Markov processes" Epifani I., Fortini, S. and Ladelli L. *Stat. Prob. Lett.* 60 (4): 445-457. 2002
<https://www.sciencedirect.com/science/article/abs/pii/S0167715202003243>
- "On mixtures of distributions of Markov chains" Fortini, S., Ladelli L., Petris G., Regazzini E. *Stoch. Proc. Appl.* 100, 147-165. 2002
<https://www.sciencedirect.com/science/article/pii/S0304414902000935>

- "On the use of the concentration function in Bayesian robustness" Fortini, S and Ruggeri F. In *Robust Bayesian Analysis. Lecture Notes in Statistics*, pp.109-126. Springer-Verlag. 2000

<https://www.springer.com/gp/book/9780387988665>

- "Exchangeability, predictive distributions and parametric models" Fortini, S. and Ladelli L. *Sankhya, A*, Vol62-1, pp. 86-109. 2000

<https://www.jstor.org/stable/25051292>

- "On parametric models for invariant probability measures". Berti P., Fortini S., Ladelli L., Regazzini E., Rigo P. *Quaderni di Statistica. Portici*, Vol. 2, pp. 39-57. 2000

- "Differential properties of the concentration function". Fortini S., Ruggeri F. *Sankhya, A*, Vol. 59, pp. 345-364. 1997

<https://www.jstor.org/stable/25051164>

- "A central limit problem for partially exchangeable random variables" Fortini S., Ladelli L., Regazzini E. *Theory Probab. Appl.* Vol. 41, Num. 2, pp. 353-379. 1996

<http://www.mathnet.ru/links/a4695b480973bab2a1d2dea68c0d048b/tvp2943.pdf>

- "Concentration function and sensitivity to the prior" Fortini S., Ruggeri F. *JISS*, Vol. 4, pp. 283-297. 1995

<https://link.springer.com/article/10.1007/BF02589116>

- "On defining neighborhoods of measures through the concentration function" Fortini S., Ruggeri F. *Sankhya, series A*, Vol. 56, Parte 3, pp. 444 - 457. 1994

<https://www.jstor.org/stable/25051010>

- "Concentration functions and Bayesian robustness" Fortini S., Ruggeri F. *J. Stat. Plann. Inference*, Vol. 40, Num. 2/3, pp. 205 - 220. 1994

<https://www.sciencedirect.com/science/article/abs/pii/037837589490121X>

- "Concentration function and coefficients of divergence for signed measures" Fortini S., Ruggeri F. *JISS* Vol. 2, No. 1, pp. 17 - 34. 1993

<https://link.springer.com/article/10.1007/BF02589073>

Editorial service

Associate Editor

*Sankhya – The Indian Journal of Statistics - Series A –
Mathematical Statistics and Probability*

Reaserch projects

2017 – 2020 PRIN

*MIUR grant 2015SNS29B
Modern Bayesian nonparametric methods*

1996 – 1998 PRIN

Decisioni statistiche: teoria e applicazioni.

1998 – 2000 PRIN

Modelli statistici: basi probabilistiche e procedure per l'inferenza e le decisioni.

1993 – 1994 PRIN

Inferenza statistica: basi probabilistiche e sviluppi metodologici.

Scientific societies membership

Institute of Mathematical Statistics (IMS)
International Society for Bayesian Analysis (ISBA)
Società Italiana di Statistica (SIS)
Unione Matematica Italiana (UMI)

Main teaching activities

Bachelor

2020 -2021 *Probability BAI*
2007-2020 *Quantitative Methods for Finance CLEF*

Master

2007-2021 *Financial Econometrics and Empirical Finance CLEFIN.*

PhD

2005-2021 *Probability I, PhD Statistics*
2018-2021 *Sochastic Processes I, PhD Statistics*
2006-2021 *Probability , PhD in Economics and Finance*

Main teaching publications

Fortini, S. (2010) *Modelli Statistici per le Applicazioni Finanziarie. Lecture Notes - Metodi Quantitativi per la Valutazione Finanziaria.*

Le Dispense del Pellicano – Egea.

Fortini, S. (2010) *Probability. Lecture Notes - PhD in Economics and Finance.*

PhD School. Bocconi University.