

# Dr. Silvia Montagna

## CURRICULUM VITAE

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- CONTACT** Dipartimento di Scienze Economico-sociali e Matematico-statistiche (ESOMAS)  
Università degli Studi di Torino  
C.so Unione Sovietica, 218/bis  
Torino, 10134 *E-mail:* [silvia.montagna@unito.it](mailto:silvia.montagna@unito.it)
- ACADEMIC POSITIONS** **Assistant Professor in Statistics (ITA: RTD-A, Legge n. 240/10)**  
Dipartimento di Scienze Economico-sociali e Matematico-statistiche (ESOMAS)  
Università degli Studi di Torino, since December 2017
- Lecturer**  
School of Mathematics, Statistics & Actuarial Science  
University of Kent (UK), January – December 2017
- Post-doctoral Research Fellow**  
Department of Statistics, University of Warwick (UK), January 2014 – December 2016
- EDUCATION** **Duke University**, Durham, North Carolina USA (August 2009 - December 2013)  
Ph.D. in Statistical Science, *Adviser:* Prof. Surya T. Tokdar  
*Title:* On Bayesian Analyses of Functional Regression, Correlated Functional Data and Non-homogeneous Computer Models
- Collegio Carlo Alberto**, Moncalieri (September 2007 - July 2009)  
Master of Arts in Economia del Programma Allievi
- Università degli Studi di Torino**, Torino (September 2007 - July 2009)  
Laurea Magistrale *summa cum Laude* in Economia  
*Adviser:* Prof. Massimo Marinacci (Università Bocconi)
- Università degli Studi di Pavia**, Pavia (September 2004 - July 2007)  
Laurea Triennale *summa cum Laude* in Economia  
*Adviser:* Prof. Antonio Lijoi (Università Bocconi)
- PUBLICATIONS** **Montagna, S.**, Orani, V., and Argiento, R. (2020). Bayesian Isotonic Logistic Regression via Constrained Splines: An Application to Estimating the Serve Advantage in Professional Tennis. *Statistical Methods & Applications*, DOI: 10.1007/s10260-020-00535-5.
- Samartsidis, P., Seaman, S. R., **Montagna, S.**, Charlett, A., Hickman, M., and De Angelis, D. (2020). A Multivariate Factor Analysis Model for Evaluating an Intervention Using Time-series Observational Data. *Journal of the Royal Statistical Society, Series A*, Vol. **183**, 1437–1459
- Samartsidis, P., **Montagna, S.**, Laird, A. R., Fox, P. T., Johnson, T., and Nichols, T. E. (2019). Estimating the Prevalence of Missing Experiments in a Neuroimaging Meta-analysis. *Research Synthesis Methods*, Vol. **11**, 866–883.
- Montagna, S.** and Hopker, J. (2018). A Bayesian Approach for the Use of Athlete Performance Data Within Anti-doping. *Frontiers in Physiology*, DOI: 10.3389/fphys.2018.00884.
- Montagna, S.**, Wager, T., Feldman Barrett, L., Johnson, T. D., and Nichols, T. E. (2018). Spatial Bayesian Latent Factor Regression Modelling of Coordinate-based Meta-analysis Data. *Biometrics*, Vol. **74**, 342–353.
- Samartsidis, P., **Montagna, S.**, Johnson, T. D., and Nichols, T. E. (2017). The Coordinate-based Meta-analysis of Neuroimaging Data. *Statistical Science*, Vol. **32**, 580–599.
- Montagna, S.**, and Tokdar, S. T. (2016). Computer Emulation with Non-stationary Gaussian Processes. *SIAM/ASA Journal on Uncertainty Quantification*, Vol. **4**, 26–47.
- Montagna, S.**, Tokdar, S. T., Neelon, B., and Dunson, D. B. (2012). Bayesian Latent Factor Regression for Functional and Longitudinal Data. *Biometrics*, Vol. **68**, 1064–1073.

UNDER REVIEW Dolmeta, P., Argiento, R., and **Montagna, S.** (2021). Bayesian GARCH Modeling of Functional Sports Data, Submitted to *AStA Advances in Statistical Analysis*.

TEACHING **Università di Torino**, Torino  
MSc in Stochastics & Data Science (Mathematics Department):  
*Statistical Machine Learning* (EN), since February 2018  
*Bayesian Statistics* (EN), since September 2019  
**University of Kent**, Canterbury, Kent UK  
*Stochastic Models in Ecology and Medicine*, MSc in Statistics, February – April 2017  
**Duke University**, Durham, North Carolina USA  
*Probability and Statistical Inference*, BSc in Statistical Science, May - June 2013

STUDENTS Claudia Berloco, PhD in Modelling & Data Science, Univ. di Torino (Nov 2018 - present)  
Topic: Bayesian spatial models for credit risk management  
Patric Dolmeta, MSc in Stochastics & Data Science, Univ. di Torino (2020)  
Current: PhD in Statistics & Computer Science, Università Bocconi, Milano  
Ilaria Pia, MSc in Stochastics & Data Science, Univ. di Torino (2020)  
Current: PhD in Statistics, University of Helsinki, Finland  
Emilio Herreman, MSc in Stochastics & Data Science, Univ. di Torino (2019)  
Current: BI consultant, PayPal, Mexico  
Vanessa Orani, MSc in Stochastics & Data Science, Univ. di Torino (2019)  
Current: Research scholar, Consiglio Nazionale delle Ricerche, Genova  
Gianluca Zoppo, MSc in Stochastics & Data Science, Univ. di Torino (2018)  
Current: Phd in Electrical, Electronics and Communications Engineering, Politecnico di Torino  
Hashani Kumarasinghe, MSc in Stochastics & Data Science, Univ. di Torino (2018)  
Current: Software engineer, Zone 24×7, Colombo, Sri Lanka  
Eleni Changoudi, MSc in Statistics, University of Kent (2017)  
Title: Model-based summaries in Bayesian point-pattern analysis: a comparison with non-parametric estimates

PHD COMMITTEES External examiner, PhD in Psychology, University of Ghent, Belgium (2019)  
Internal examiner, PhD in Statistics, University of Kent, UK (2017)

INVITED / CONTRIBUTED TALKS *2020 ISBA World Meeting* (pushed to 2021), virtual meeting, June 2021  
*13-th ERCIM International Conference on Computing and Statistics*, virtual meeting, December 2020  
*12-th ERCIM International Conference on Computing and Statistics*, University of London, London, UK, December 2019  
*4-th East Asia Meeting on Bayesian Statistics*, Kobe University, Kobe, Japan, July 2019  
*11-th ERCIM International Conference on Computing and Statistics*, University of Pisa, Pisa, Italy, December 2018  
*9-th ERCIM International Conference on Computing and Statistics* University of Seville, Seville, Spain, December 2016  
*Spatial Statistics: Emerging Patterns*, University of Avignon, Avignon, France, June 2015  
*7-th ERCIM International Conference on Computing and Statistics*, Università di Pisa, Pisa, December 2014

INVITED SEMINARS *Journal Club*, The International Biometric Society, Online meeting, June 2018

*Statistics Seminars*, The University of Edinburgh, Edinburgh, UK, October 2017  
*Statistics Seminars*, Università Bocconi, Milano, April 2016  
*Decision Research at Warwick (DR@W) Forum*, University of Warwick, Coventry, UK, February 2016  
*Young Researchers Meeting*, University of Warwick, Coventry, UK, December 2014  
*Stats Seminars*, Nestlé Institute of Health Sciences, Lausanne, Switzerland, January 2014  
*Statistics Seminars*, Collegio Carlo Alberto, Moncalieri (To), December 2012

OTHER  
PRESENTATIONS  
(POSTER)

*2018 ISBA World Meeting*, Edinburgh, UK, June 2018  
*2016 ISBA World Meeting*, Santa Margherita di Pula (CA), June 2016  
*Organisation for Human Brain Mapping 2015 Annual Meeting*, Hawaii Convention Centre, Honolulu, Hawaii, June 2015  
*2012 ISBA World Meeting*, Kyoto, Japan, June 2012  
*Statistical and Applied Mathematical Sciences Institute (SAMSI)*, Research Triangle Park, NC USA, April 2012

FUNDING

2018 – 2020 PI of the ESOMAS Department research project titled *Bayesian Analysis of Dependent Functional Data*, Università di Torino  
2019 – 2021 Coordinator of the ESOMAS Department research project titled *Bayesian Analysis of Non-exchangeable Data*, Università di Torino. Research team: Pierpaolo De Blasi, Luigi Bollani, Stefano Favaro, Matteo Ruggiero

AWARDS

**Early Career Researchers Travel Grant**  
*ISBA 2016 World Meeting*, Sardinia, Italy, June 2016  
**Early Career Researchers Travel Grant**  
*ISBA 2012 World Meeting*, Kyoto, Japan, June 2012  
**SAMSI Graduate Student Fellowship**  
*SAMSI*, Research Triangle Park, NC USA, August 2011 - June 2012

MEMBERSHIPS

International Society for Bayesian Analysis (ISBA)

PROFESSIONAL  
SERVICE

**Secretary**, Junior ISBA (*j*-ISBA) Section, January 2016 - December 2017  
**Program Chair**, Junior ISBA (*j*-ISBA) Section, January 2014 - December 2015

ORGANISATION OF  
SCIENTIFIC EVENTS

With *j*-ISBA members:  
- Invited Session titled “*Nonparametric Bayesian Analysis of Copula Models*”, 10-th International Conference of the *ERCIM Working Group on Computational and Methodological Statistics*, University of London, London, UK, December 2017  
- Topic-contributed session titled “*Junior Research in Bayesian Modeling for High-dimensional Data*”, Joint Statistical Meetings, Baltimore, USA, July 2017  
- Invited Session titled “*Bayes: Legacy*”, ISBA World Meeting, Sardinia, Italy, June 2016

EDITORIAL  
ACTIVITY

Reviewed articles for: *Bayesian Analysis*, *Biometrics*, *Journal of the American Statistical Association (Applications and Case Studies)*, *NeuroImage*, *Statistics & Its Interface*, *Statistics & Probability Letters*, *Statistics in Biosciences*, *Technometrics*