Gianna S. Monti

Curriculum Vitae

▬▬▬ Personal Information

Position	Tenured assistant professor (ricercatore confermato) of Statistics.
Maternity leave	May - October, 2019.
Address	Department of Economics, Management and Statistics
	Università degli Studi di Milano-Bicocca
	Piazza dell'Ateneo Nuovo, 1
	20126 Milano, Italy
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✉	gianna.monti@unimib.it
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h-index	8 (Scopus)

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▬▬▬ National Professional Qualifications

National Academic Qualification as Associate Professor of Statistics in the Italian higher education system, in the call 2021/2023 (Ministerial Decree n. 553/2021 and 589/2021) for the disciplinary field of 13/D1 - Statistics. (Academic Recruitment Field 13/D - Statistics and mathematical methods for decisions, according to the national classification).

▬▬▬ Research interests

Compositional Data, Robust Statistics, Statistical Methods for Ecological Data, Mixture-models, Bayesian hierarchical modelling, Regression of high-dimensional compositional data, microbiome data analysis.

Research visits

2018   Institute of Statistics and Mathematical Methods in Economics, Vienna University of Technology, Vienna, Austria (May).

2016   Institute of Statistics and Mathematical Methods in Economics, Vienna University of Technology, Vienna, Austria, (May).

2014   Department of Statistics and Probability Theory, Vienna University of Technology, Vienna, Austria, (Mar-May).

2012   Department of Mathematical Analysis and Applications of Mathematics, Palacký University Olomouc, Faculty of Science, Olomouc, Czech Republic, (Oct-Dec), (visiting funded by Palacký University).

2009   Department of Statistics, Stanford University, California (USA), (Jul-Oct).

Positions and Education

Sept. 2008   **Tenured assistant professor (ricercatore confermato) of Statistics**, *Università degli Studi di Milano-Bicocca*, Italy.

Jan 2007 - Aug 2008   **Postdoctoral Research Fellow, Department of Statistics**, *Università degli Studi di Milano-Bicocca*, Italy.

2007   **PhD in Statistics**, *Università degli Studi di Milano-Bicocca*, Italy.

2003   **Degree in Statistics for the Demographic and Social Sciences**, *Università degli Studi di Milano-Bicocca*, Italy (bachelor and master degree, summa cum laude).

Publications

Under review

1. Monti, G.S., , Filzmoser, P. (2022) A robust knockoff filter for sparse regression analysis of microbiome compositional data, *submitted to* **Computational Statistics**

2. Bonini, M., Monti, G.S., Pelagatti, M., Ceriotii, V., Re, E., Bramé, B., Bottero, P., Tosi, A., Vaghi, A., Martelli, A., Traina, G., Rivolta, L., Rivolta, F., Ortolani, C.M. (2022) Ragweed Pollen Concentration Predict Seasonal Oculo-rhinitis and Asthma Severity in Subjects Allergic to Ragweed, *submitted to* **Scientific Reports**

International peer-reviewed journals

1. Tettamanzi, F., Bagnardi, V., Louca, P., Nogal, A., Monti, G.S., Mambrini, S.P., Lucchetti, E., Maestrini, S., Mazza, S., Rodriguez-Mateos, A., Scacchi, M., Valdes, A.M., Invitti, C., Menni, C. (2021) A High Protein Diet Is More Effective in Improving Insulin Resistance and Glycemic Variability Compared to a Mediterranean Diet—A Cross-Over Controlled Inpatient Dietary Study. **Nutrients**, 13(12):4380. https://doi.org/10.3390/nu13124380

2. Monti, G.S., Filzmoser, P. Robust Logistic Zero-Sum Regression for Microbiome Compositional Data. **Advances in Data Analysis and Classification**, 1-24, doi: 10.1007/s11634-021-00465-4.

3. Monti, G.S., Filzmoser, P. (2021). Sparse least trimmed squares regression with compositional covariates for high dimensional data, **Bioinformatics**, 37 (21),

3805–3814.

4. Rizzi, C., Villa, S., Chimera, C., Finizio, A., Monti, G.S. (2021). Spatial and temporal trends in the ecological risk posed by polycyclic aromatic hydrocarbons in Mediterranean Sea sediments using large-scale monitoring data. **Ecological Indicators**, 129(October 2021).

5. Migliorati, S., Monti, G.S., Vighi, M. (2021). Ecological hazard assessment via species sensitivity distributions: The non-exchangeability issue. **Biometrical Journal**, 63(4), 875-892.

6. Gentili, R., Solari, A., Diekmann, M., Duprè, C., Monti, G.S., Armiraglio, S., Assini, S., Citterio, S. (2018). Genetic differentiation, local adaptation and phenotypic plasticity in fragmented populations of a rare forest herb. **PeerJ**, 6:e4929; DOI 10.7717/peerj.4929.

7. Monti, G.S., Filzmoser, P., Deutsch, R. (2018). A Robust Approach to Risk Assessment Based on Species Sensitivity Distributions. **Risk Analysis**, 38(10), 2073-2086.

8. Migliorati, S., Ongaro, A., Monti, G.S. (2017). A structured Dirichlet mixture model for compositional data: inferential and applicative issues. **Statistics and Computing**, 27(4), 963-983.

9. Villa, S., Migliorati, S., Monti, G.S., Holoubek, I., Vighi, M. (2017). Risk of POP mixtures on the Arctic food chain. **Environmental Toxicology and Chemistry**, 36(5), 1181-1192.

10. Machalova, J., Hron, K., Monti, G.S. (2016). Preprocessing of centred logratio transformed density functions using smoothing splines. **Journal of Applied Statistics**, 43(8), 1419-1435.

11. Monti, G.S., Migliorati, S., Hron, K., Hrůzová, K., Fišerová, E. (2015). Log-ratio approach in curve fitting for concentration-response experiments. **Environmental and Ecological Statistics**, 22(2), 275-295.

12. Villa, S., Migliorati, S., Monti, G.S., Vighi, M. (2012). Toxicity on the luminescent bacterium Vibrio fischeri (Beijerinck). II: Response to complex mixtures of heterogeneous chemicals at low levels of individual components. **Ecotoxicology and Environmental Safety**, 86, 93-100.

13. Sala, S., Migliorati, S., Monti, G.S., Vighi M (2012). SSD-based rating system for the classification of pesticide risk on biodiversity. **Ecotoxicology**, 21(4), 1050-1062.

14. Monti, G.S., Walther, G. (2010). Correlation analysis for proportions via updating and resampling. **Journal of Statistics: Advances in Theory and Applications**, 3(1), 17-26.

15. Vighi, M., Migliorati, S., Monti, G.S. (2009). Toxicity on the luminescent bacterium Vibrio Fischeri (Beijerinck). I: QSAR equation for narcotics and polar narcotics. **Ecotoxicology and Environmental Safety**, 72(1), 154-161.

Book Chapters

1. Monti, G.S., Mateu-Figueras, G. (2022) Full Normal Plot, **Earth Sciences Series. Encyclopedia of Mathematical Geosciences**, edited by B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg, Springer *Forthcoming*.

2. Monti, G.S., Mateu-Figueras, G., K. Hron (2022) Additive Logistic Normal Distribution, **Earth Sciences Series. Encyclopedia of Mathematical Geo-**

sciences, edited by B. S. Daya Sagar, Qiuming Cheng, Jennifer McKinley and Frits Agterberg, Springer *Forthcoming*.

3. Mateu-Figueras, G., Monti, G.S., Egozcue, J. (2021). Distributions on the Simplex Revisited. In **Advances in Compositional Data Analysis: Festschrift in Honour of Vera Pawlowsky-Glahn**, P. Filzmoser, K. Hron, J.A. Martin-Fernandez, J. Palarea-Albaladejo (editors). Springer, pp. 61-82.

4. Benedan, L., Monti, G.S. (2021). Predicting the Risk of Gambling Activities in Adolescence: A Case Study. In **Data Science and Social Research II. Studies in Classification, Data Analysis, and Knowledge Organization**, M. Zenga and P. Mariani (editors). Springer, pp. 47-57.

5. Migliorati, S., Monti, G.S. (2021). A Bayesian Mixture Model for Ecotoxicological Risk Assessment. In **Data Science and Social Research II. Studies in Classification, Data Analysis, and Knowledge Organization**, M. Zenga and P. Mariani (editors). Springer, pp. 281-291.

6. Monti, G.,S. Filzmoser, P. (2020). High-dimensional regression with compositional covariates: a robust perspective. In **Book of short papers - SIS 2020**, N.S. Alessio Pollice (editors). Pearson, pp. 105-110.

7. Migliorati, S., Monti, G.S. (2020). An improved sensitivity-data based method for probabilistic ecological risk assessment. In **Book of short papers - SIS 2020**, N.S. Alessio Pollice (editors). Pearson, pp. 822-827.

8. Monti, G.S., Solari, A. (2016). Slot Machine II. In **Ludocrazia. Un lessico dell'azzardo di massa**, Marco Dotti e Marcello Esposito (editors). O barra O edizioni.

9. Monti, G.S., Solari, A. (2016). Probabilità. In **Ludocrazia. Un lessico dell'azzardo di massa**, Marco Dotti e Marcello Esposito (editors). O barra O edizioni.

10. Monti, G.S., Solari, A. (2016). Gioco equo. In **Ludocrazia. Un lessico dell'azzardo di massa**, Marco Dotti e Marcello Esposito (editors). O barra O edizioni.

11. Monti, G.S., Solari, A. (2016). Fallacia dello scommettitore. In **Ludocrazia. Un lessico dell'azzardo di massa**, Marco Dotti e Marcello Esposito (editors). O barra O edizioni.

12. Monti, G.S., Mateu Figueras, G., Pawlowsky, G., JJ Egozcue, V. (2016). A Regression Model for Compositional Data Based on the Shifted-Dirichlet Distribution. In **Compositional Data Analysis, Springer Proceedings in Mathematics & Statistics**, 187, J.A. Martín-Fernández, S. Thió-Henestrosa (editors). Springer New York LLC, pp. 127-143.

13. Monti, G.S., Mateu Figueras, G., Pawlowsky Glahn, V. (2011). *Notes on the Scaled Dirichlet distribution*. In **Compositional Data Analysis: Theory and Applications**, V. Pawlowsky Glahn, A. Buccianti (editors). Toronto, John Wiley & Sons, pp. 128-138.

Peer-reviewed conference proceedings

1. Monti, G.S., Filzmoser, P. (2022) The knockoff filter for FDR control in robust ZeroSum regression in microbiome analysis, In **Book of Short Papers - IES2022 Innovation and Society 5.0: Statistical and Economic Methodologies for Quality Assessment**, 27 - 28 Editors: Lombardo, R., Camminatiello, I. and

Simonacci, V., January 27-28, 2022, Capua, Italy.

2. Monti, G.S., Bonini, M., Ceriotti, V., Pelagatti, M., Ortolani, C. (2021). Compositional Data Techniques for the Analysis of the Ragweed Allergy. In **Book of Short Papers - SIS 2021 - 50th Scientific meeting of the Italian Statistical Society**. C. Perna, N. Salvati, F. Schirripa Spagnolo (editors), Pearson, pp. 1350-1355. June 21-25, 2021, Pisa, Italy.

3. Monti, G.S., Filzmoser, P. (2021). A Robust Approach to Microbiome-Based Classification Problems. In **Book of Short Papers - SIS 2021 - 50th Scientific meeting of the Italian Statistical Society**, C. Perna, N. Salvati, F. Schirripa Spagnolo (editors), Pearson, pp. 1326-1331. June 21-25, 2021, Pisa, Italy.

4. Bonini, M., Monti, G.S., Ceriotti, V., Re, E., Bramè, B., Bottero, P., et al. (2020). Features of ragweed allergy: symptoms and drug consumption related to airborne ragweed pollen concentrations in Northern Italy. In **Abstract Book of the 7th European Symposium on Aerobiology "Bioaerosols and Environmental Impacts"**, European Aerobiology Society. June 22-26, 2020, Cordoba, Spain.

5. Monti, G.S., Benedan, L., Mercandelli, M. (2019). A machine learning approach in the risk estimate of gambling in adolescents: a case study. In **Book of Abstracts of the Second international conference on data science and social research (DSSR2019)**. February 4-5, 2019, University of Milano - Bicocca and Università IULM, Milano, Italy.

6. Mateu-Figueras, G., Monti, G.S., Ortego, M. (2019). Alternative Kolmogorov-Smirnov Test of Goodness of Fit Based on Aitchison Distance. In **Book of Abstracts of the 8th International Workshop on Compositional Data Analysis (CoDaWork2019)**. June, 3-8, 2019, Universitat Politècnica de Catalunya, Terrassa (Barcelona), Spain.

7. Monti, G.S., Mateu-Figueras, G., Ortego, M., Pawlowsky-Glahn, V., Egozcue, J. (2018). Rethinking the Kolmogorov-Smirnov Test of Goodness of Fit in a Compositional Way. In **Book of Short Papers SIS2018 - 49th Meeting of the Italian Statistic Society**, A. Abbruzzo, E. Brentari, M. Chiodi, D. Piacentino (editors), Pearson, pp. 1379-1384. June 20-22, 2018, Palermo, Italy.

8. Monti, G.S., Mateu-Figueras, G., Ortego, M., Pawlowsky-Glahn, V., Egozcue, J. (2017). Modified Multivariate Kolmogorov-Smirnov Test of Goodness of Fit. In **Proceedings book of the 7th international Workshop on Compositional Data analysis (CoDaWork2017)**, K. Hron and R. Tolosana-Delgado (editors), pp.152-158. June 5-9, 2017, Abbadia San Salvatore (Siena), Italy.

9. Monti, G.S., Migliorati, S. (2017). Compositional approach to the analysis of species abundance data. In **Proceedings book of the 7th international Workshop on Compositional Data analysis (CoDaWork2017)**, K. Hron and R. Tolosana-Delgado (editors), pp. 141-151. June 5-9, 2017, Abbadia San Salvatore (Siena), Italy.

10. Monti, G.S., Filzmoser, P., Deutsch, R. (2016). Robust estimation approach for hazardous concentration levels using species sensitivity distribution. In **Proceedings of the 11th International Conference in Computer Data Analysis and Modeling: Theoretical and Applied Stochastics**, S. Aivazian, P. Filzmoser, Y. Kharin (editors), Publishing center of BSU. September 6-10, 2016, Minsk, Belarus.

11. Crosato, L., Monti, G.S. (2015). A simplicial approach to inequality measurement. In **Proceedings of the SIS2015 conference: Statistics and Demography: the Legacy of Corrado Gini**. September 9–11, 2015, Treviso, Italy.

12. Monti, G.S., Mateu-Figueras, G., Pawlowsky-Glahn, V., Egozcue, J.J. (2015). Shifted-Dirichlet Regression vs Simplicial Regression: a comparison. In **Proceedings of the 6th International Workshop on Compositional Data Analysis (CoDawork 2015.)**, Thió-Henestrosa, S; Martín Fernández, JA (editors). June 1-5, 2015, L'Escala (Girona), Spain.

13. Monti, G.S., Mateu Figueras, G., Pawlowsky Glahn, V., Egozcue, J.J. (2014). Scaled-Dirichlet Covariate Models for Compositional Data. In **Proceedings of the 47th SIS Scientific Meeting of the Italian Statistical Society**, Cooperativa Universitaria Editrice Cagliaritana CUEC. June 10-14, 2014, Cagliari, italy.

14. Monti, G.S., Hron, K., Filzmoser, P., Templ, M. (2013). Covariance-Based Outlier Detection for Compositional Data with Structural Zeros: Application to Italian Survey of Household Income and Wealth Data. In **Advances in Latent Variables**, E. Brentari, M. Carpita (editors). Vita e Pensiero, Milano.

15. Migliorati, S., Monti, G.S., Ongaro, A. (2012). Point and interval estimation for the Flexible Dirichlet model. In **Proceedings of the 2nd Stochastic Modeling Techniques and Data Analysis International Conference (SMTDA2012)**, C. Skiadas (editors), pp.177-190. June 5 - 8, 2012, Chania, Crete, Greece.

16. Ongaro, A., Migliorati, S., Monti, G.S. (2011). A new multivariate distribution as a basis for compositional data. In **Proceedings of 14th Applied Stochastic Models and Data Analysis Conference (AMSDA2011)**. June 7-10, 2011. University of Rome "La Sapienza", Italy.

17. Monti, G.S., Vighi, M. (2011). A Bayesian approach to model ECp in concentration–response experiments. In **Proceedings of 14th Applied Stochastic Models and Data Analysis Conference (AMSDA2011)**. June 7-10, 2011. University of Rome "La Sapienza", Italy.

18. Monti, G.S., Mateu-Figueras, G., Pawlowsky-Glahn, V., Egozcue, J.J. (2011). The shifted-scaled Dirichlet distribution in the simplex. In **Proceedings of the 4th International Workshop on Compositional Data Analysis (CoDaWork2011)**, Egozcue, J.J., Tolosana Delgado, R. and Ortego Martinez, M.I. (editors). May 9-13, 2011, Sant Feliu de Guíxols, Spain.

19. Migliorati, S., Monti, G.S., Ongaro, A. (2010). The Flexible Dirichlet family: some inferential issues. In **Proceedings of Stochastic Modeling Techniques and Data Analysis International Conference (SMTDA2010)**, C. Skiadas (editors). June 8-11, 2010, Chania, Crete, Greece.

20. Papa, E., Kovarich, S., Monti, G.S., Gramatica, P., Vighi, M. (2009). Pesticides and Narcotics toxicity to Vibrio fischery studied by QSAR. In **SETAC Europe (Society of Environmental Toxicology and Chemistry) 19th Annual Meeting**, "Protecting ecosystem health: facing the challenge of a globally changing environment". 31 May - 4 June, 2009, Göteborg, Sweden.

21. Monti, G.S. (2009). Analysis of correlation among components of a Flexible Dirichlet Distribution. In **Proceedings of the 6th Conference on Complex Models and Computational Intensive Methods for Estimation and Predic-**

tion (S.Co. 2009), Maggioli Editore, Santarcangelo di Romagna (RN), pp. 217-222. September 14-16, 2009, Milano, Italy.

22. Ongaro, A., Migliorati, S., Monti, G.S. (2008). A new distribution on the simplex containing the Dirichlet family. In **Proceedings of the 3rd Compositional Data Analysis Workshop (CODAWORK08)**. May 27-30, 2008, University of Girona, Spain.

23. Migliorati, S., Monti, G.S., Ongaro, A. (2008). E-M algorithm: an application to a mixture model for compositional data. In **Proceedings of the XLIV Meeting of the Italian Statistical Society (SIS2008)**, Cleup. June 25–27, 2008, Arcavacata di Rende, (Cosenza), Italy.

Presentations

1. A Robust Approach to Classification and Regression Tasks for Microbiome Data. **International Conference on Robust Statistics ICORS2021**. September 21-24, 2021, TU Wien, Austria. (online)

2. A robust approach to classification and regression tasks for microbiome data. March 24, 2021, **Department of Economics, University of Crete**, Greece. Invited seminar. (online)

3. CoDa in ecotoxicology, **Week-CoDaCourse with CoDaPack and R**. July 6, 2018, University of Girona, Spain. Invited talk.

4. L'azzardo che ti rovina ... probabilmente, joint work with Aldo Solari, **CuriosaMente - Aperitivi culturali a Villa Forno**. January 29, 2015, Cinisello Balsamo, Milan, Italy. Invited seminar.

5. Scaled-Dirichlet Regression for Compositional Data, **Olomoucian Days of Applied Mathematics (ODAM 2015)**. May 20, 2015, Olomouc, Czech Republic. Invited talk.

6. Simplicial regression: a useful tool in ecological risk assessment. **The 6th International Conference of the ERCIM WG on Computational and Methodological Statistics (ERCIM 2013)**. December 14-16, 2013, Senate House, University of London, UK.

7. Concentration-Response Curves in Bioassays, within the **Project: A-Math-Net Applied Mathematics Knowledge Transfer Network CZ.1.07/2.4.00/17.0100, Statistical processing of experimental data**. November 16, 2012, Velké Losiny, Czech Republic. Invited talk.

8. Compositional data: distributions on the simplex and correlation analysis. August 25, 2009, **Department of Statistics, Stanford University**, (CA). Statistics seminar.

Research Dissemination Papers

1. Benedan, L., Monti, G.S., Cerasi, V., Mari, S., & Orsenigo, J. (2020). Fattori di rischio e protezione nel gioco d'azzardo in adolescenza: uno studio interdisciplinare. **Statistica & Società**.

2. Monti, G.S. (2020). Un approccio composizionale allo studio del microbioma. **Statistica & Società**.

Scientific collaborations

Main National scientific collaborations

1. Department of Economics, Management and Statistics, University of Milano Bicocca
2. Department of Earth and Environmental Sciences, University of Milano Bicocca
3. Department of Statistics and Quantitative Methods at the University of Milano Bicocca

Main International scientific collaborations

1. Department of Mathematical Analysis and Applications of Mathematics, Palacký University Olomouc, Czech Republic
2. Department of Computer Science, Applied Mathematics and Statistics, Universitat de Girona, Spain
3. Department of Civil and Environmental Engineering, Universitat Politècnica de Catalunya, Spain
4. Institute of Statistics and Mathematical Methods in Economics, Vienna University of Technology, Austria

Funded projects

1. Local coordinator of the research project Fondi di Ateneo per la Ricerca (F.A.R) of the Department of Economics, Management and Statistics, University of Milano-Bicocca, on *Inferential methods for sparse compositional data* (2019-2021).
2. Local coordinator of the research project Fondi di Ateneo per la Ricerca (F.A.R) of the Department of Economics, Management and Statistics, University of Milano-Bicocca, on *Statistical methods for complex problems* (2013-2018).
3. Member of the project *INTEGRATE Integrated Solutions for Agile Manufacturing in High-mix Semiconductor Fabs* (2013-2015).

Teaching

- *Modern Econometrics for management studies*, PhD course, Doctoral research in Business for Society, University of Milano Bicocca, AcYr: 2021/22.
- *Computational Statistics*, graduate level, master's degree in Statistical and Economic Sciences, University of Milano Bicocca, AcYrs: 2021/22, 2020/21, 2019/20, 2018/19, 2017/18, 2016/17.
- *High Dimensional Data Analysis*, graduate level, master's degree in Data Science, University of Milano Bicocca, AcYrs: 2021/22, 2020/21, 2019/20, 2018/19.
- *Introduction to R*, undergraduate level, MOOC course, Federica WebLearning, AcYr: 2018/19.
- *Statistics*, undergraduate level, bachelor's degree in Business economics and management, Bocconi University, AcYrs: 2021/22, 2020/21, 2019/20, 2018/19, 2017/18, 2016/17, 2015/16, 2014/15.
- *Multivariate Statistical Analysis*, undergraduate level, bachelor's degree in Statistical and Economic Sciences, University of Milano Bicocca, AcYrs: 2017/2018, 2016/2017, 2014/15, 2013/14, 2012/13, 2011/12, 2010/11, 2009/10.
- *Statistics with R*, PhD course. Doctoral research in Chemical, Geological and Environmental Sciences, University of Milano Bicocca, AcYr: 2014/15.

- *Element of statistical inference*, graduate level, master's degree in Statistical and Economic Sciences, University of Milano Bicocca, AcYrs: 2012/13, 2011/12, 2010/11, 2009/10.
- *Programming with R*, graduate level, master's degree in Biostatistics, University of Milano Bicocca, AcYrs: 2012/13, 2011/12, 2010/11, 2009/10.
- *Programming with R*, PhD course. Doctoral research in Statistics of the University of Milano Bicocca, AcYr: 2012/13.
- Teaching assistant for *Bayesian Inference*, graduate level, master's degree in Biostatistics, University of Milano Bicocca, AcYrs: 2009/10, 2008/09.
- Teaching assistant for *Statistics*, undergraduate level, bachelor's degree in Political Sciences, University of Milano, AcYr: 2005/06.
- *Statistics and Probability Calculus*, Master in Health Statistic course, University of Milano Bicocca, AcYr: 2004/05.

Software

In-depth knowledge of the programming environments for statistical computing and graphics R/S-Plus. Discrete knowledge of software packages Matlab, Mathematica, SPSS, SAS, Python, STATA, OpenBUGS. Digital and Mathematical typesetting (LaTex).

I contributed to the R Open-Source project as developer and maintainer of the package: RobZS, `https://github.com/giannamonti/RobZS`.

Conference Organization and other scientific activities

- Organizer and Chair of the solicited session *Compositional Data Analysis* at IES 2022: "Innovation and Society 5.0: Statistical and Economic Methodologies for Quality Assessment". January 27-28, 2022, Capua, Italy.
- Organizer and Chair of the solicited session *Composition in the Data Science Era* at SIS 2021 - 50th Scientific meeting of the Italian Statistical Society. June 21-25, 2021, Pisa, Italy.
- Local Organizer of the 7th international Workshop on Compositional Data analysis (CoDaWork2017). June, 5-9, 2017, Abbadia San Salvatore (Siena, Tuscany, Italy).
- Local Organizer of the Innovation and Society 2013 Conference (IES 2013), University of Milano Bicocca. December 9-10, 2013.
- Member of the Library Commission, University of Milano-Bicocca, to provide input and recommendations regarding the development, implementation and maintenance of the Bicocca's library.
- Scientific responsible for the project "Selfie 2.0. Survey on youth lifestyles", approved by the Bicocca ethics committee in 2019. The project is linked to a personal and scientific interest in the study of risk factors related to dysfunctional youthful behaviors and their prevention. The project is of particular importance also for its multidisciplinary nature, the Bicocca Applied Statistics Center, the Department of Psychology and the Department of Human Sciences for Education "Riccardo Massa" are also involved.

Editorial and Refereeing activity

- Editorial board member of the journal *Induzioni. Demografia, probabilità, statistica a scuola*, regarding the activity of Italian university statisticians to promote statistics in schools.
- Occasional referee activities for the following journals: *AJSE-Mathematics, Chemometrics and Intelligent Laboratory Systems, Computational Statistics, Electronic Journal of Applied Statistical Analysis, Integrated Environmental Assessment and Management, International Journal of Aerospace Engineering, International Journal of Environmental Research and Public Health, International Journal of Molecular Sciences, Italian Journal of Applied Statistics, Journal of Applied Statistics, Quality & Quantity, Science of the Total Environment, Statistics and Probability Letters, Stats*.
- Served as Article Editor for SAGE Open.
- Referee for the VQR 2015-19.
- External review for the PhD thesis of M. Comas Cufí, Doctoral School, University of Girona, Spain (2018).
- External review for the PhD thesis of V. Simonacci, PhD in International Studies of the University of Naples "L'Orientale", (2019).

Scientific societies and other information

- Member of the Italian Statistical Society (SIS).
- Member of the CLAssification and Data Analysis Group (CLADAG) of the Italian Statistical Society (SIS).
- Member of the International Association for Statistical Computing (IASC-ISI).
- Elected Council member of the CoDa-Association for the period 2021-2025, an organization which brings together scientists interested in developing methods for compositional data modelling and their application in different fields.
- Member of the Center for Neurosciences – Milan (NeuroMi), scientific committee.
- Member of the Bicocca Applied Statistic Center (B-ASC), scientific committee.
- Member of the Interdepartmental Research Center called "Health and Environmental Sustainability" (POLARIS), scientific committee.
- Member of the Academic board of the PhD in "Statistics", University of Milano Bicocca, 2011-2015.
- Member of the Academic board of the PhD in "Statistics and Mathematics for Finance", University of Milano Bicocca, 2013-2016.

Languages

Italian	Mother tongue
English	Fluent

In accordance with Italian law art. 13 of D. Lgs. 196/2003 and art. 13 GDPR 679/16, I hereby authorize the treatment of my personal information.

Last updated: May 9, 2022 ▪