

# F. Marta L. Di Lascio

## Curriculum Vitae

### Personal information

First name Francesca Marta Lilja  
Last name Di Lascio  
Work address Faculty of Economics and Management, Free University of Bozen-Bolzano, Piazza Università, 1 - 39100, Bozen-Bolzano, Italy  
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### Current position

Oct. 2025 **Director of the Master in Data Analytics for Economics and Management**  
Free University of Bozen-Bolzano, Faculty of Economics and Management

Dec. 2023 – **National Scientific Qualification for Full Professor - Sector: 13/D1 Statistics (13/STAT-01 - Statistics)**  
Dec. 2034

Oct. 2020 **Associate Professor of Statistics**  
Free University of Bozen-Bolzano, Faculty of Economics and Management

### Academic positions

Oct. 2017 – **Fixed-term Assistant Professor of Statistics (RTD Senior)**  
Sept. 2020 Faculty of Economics and Management, Free University of Bozen-Bolzano.

Oct. 2012 – **Fixed-term Assistant Professor of Statistics (RTD Junior)**  
Sept. 2017 Faculty of Economics and Management, Free University of Bozen-Bolzano.

Oct. 2010 – **Senior Research Fellow**  
Sept. 2012 Department of Statistical Sciences “P. Fortunati”, University of Bologna.

Oct. 2009 – **Research Fellow**  
Sept. 2010 Rimini Campus Branch, University of Bologna.

Jan. 2008 – **Junior Research Fellow**  
Sept. 2009 Department of Statistical Sciences “P. Fortunati”, University of Bologna.

### Education and Training

Apr. 2008 **Ph.D. in Statistics**  
Department of Statistical Sciences “P. Fortunati”, University of Bologna. Thesis’ title: *Analyzing the Dependence Structure of Microarray Data: a Copula-Based Approach*. Supervisor: Prof. P. Monari, Co-Supervisor: Dr. S. Giannerini.

Sept. 2006 – **Visiting Ph.D. student**  
Feb. 2007 Department of Biology, University of Pennsylvania, Philadelphia, PA, USA. Research Project: *Statistical analysis of DNA sequences: dependence structure and cluster analysis in microarray experiments*. Supervisor: Prof. Warren J. Ewens.

Mar. 2004 **Bachelor degree in Statistical Sciences**  
Faculty of Statistical Sciences, University of Bologna, Italy. Final mark: 110/110 *cum laude*. Supervisor: Prof. Estela Bee Dagum.

## Schools

Feb. 2007 7a International Winter School on “Applied Bioinformatics: the Test Case of Human Genome”, Department of Biology, University of Bologna, Italy.

Dec. 2005 5a International Winter School on “REASONing under PARTial Knowledge”, Department of Mathematics and Computer Sciences, University of Perugia, Italy.

July 2005 Summer course of Statistics and Probability “Sequential Design and Analysis with Application to Clinical Trials”, Bocconi University, Milan, Italy.

May 2004 SIS School “Nonlinear time series analysis: theory and applications”, Statistical Italian Society (SIS), University Campus of Fisciano, Salerno, Italy.

## Research interests

Stochastic models with copulas

Statistical models for time series, panel data and spatial data

Imputation methods for multivariate missing data

Clustering techniques for complex dependent data

Statistical applications in environmental science, food science, energy, medicine and biology, finance, cultural economics, tourism

## Publications

### Refereed Journals

1. DI LASCIO, F.M.L., Noy, I., and Perazzini, S. (2025) “Modeling spatial correlation between earthquake insured losses in New Zealand: A mixed-effects analysis”. *Risk analysis*, 45(2), p. 387-398. DOI: 10.1111/risa.16638.
2. DI LASCIO, F.M.L., Menapace, and A.Pappadà, R. (2024) “A spatially-weighted AMH copula-based dissimilarity measure for clustering variables: an application to urban thermal efficiency”. *Environmetrics*, 35(1), e2828. DOI: 10.1002/env.2828.
3. DI LASCIO, F.M.L., Falchetta, G., and Ferrari, D. (2022) “Change detection from high-resolution airborne laser scans by penalized composite likelihood screening”. *Spatial statistics*, 52, p. 100710. DOI: 10.1016/j.spasta.2022.100710.
4. Fuchs, S., DI LASCIO, F.M.L., and Durante, F. (2021) “Dissimilarity functions for rank-based hierarchical clustering of continuous variables”. *Computational statistics and data analysis*, 159, p. 1-26. DOI 10.1016/j.csda.2021.107201.
5. DI LASCIO, F.M.L., Menapace, A., and Righetti, M. (2021) “Analysing the relationship between district heating demand and weather conditions through conditional copula”. *Environmental and Ecological Statistics*, 28(1), p.53-72. DOI: 10.1007/s10651-020-00475-z.
6. Visani, F., DI LASCIO, F.M.L., and Gardini, S. (2020) “The Impact of Institutional and Cultural Factors on the Use of Non-GAAP Financial Measures. International Evidence from the Oil and Gas Industry”. *Journal of International Accounting, Auditing and Taxation*, 40, p.1-21. DOI 10.1016/j.intaccaudtax.2020.100334.

7. DI LASCIO, F.M.L., Menapace, A., and Righetti, M. (2020) “Joint and conditional dependence modelling of peak district heating demand and outdoor temperature: a copula-based approach”. *Statistical Methods & Applications*, 29, p. 373–395. DOI: 10.1007/s10260-019-00488-4.
8. DI LASCIO, F.M.L. and Giannerini, S. (2019) “Clustering dependent observations with copula functions”. *Statistical Papers*, 60(1), p. 35-51. DOI 10.1007/s00362-016-0822-3 (First online 2016).
9. DI LASCIO, F.M.L., and Giannusso, D., and Puccetti, G. (2018) “A clustering approach and a rule of thumb for risk aggregation”. *Journal of Banking & Finance*, 96, p. 236-248. DOI: 10.1016/j.jbankfin.2018.07.002.
10. DI LASCIO, F.M.L. and Disegna, M. (2017) “A copula-based clustering algorithm to analyse EU country diets”. *Knowledge-Based Systems*, 132, p. 72-84. DOI: 10.1016/j.knosys.2017.06.004.
11. DI LASCIO, F.M.L., Durante, F., and Jaworski, P. (2016) “Truncation invariant copulas and a testing procedure”. *Journal of Statistical Computation and Simulation*, 86(12), p. 2362-2378. DOI 10.1080/00949655.2015.1110820.
12. Visani, F., Barbieri, P., DI LASCIO, F.M.L., Raffoni, A. and Vigo, D. (2016). “Supplier’s total cost of ownership evaluation: a data envelopment analysis approach”. *Omega*, 61, p. 141-154. DOI 10.1016/j.omega.2015.08.001.
13. Candela, G., Castellani, M., Pattitoni, P. and DI LASCIO, F.M.L. (2016). “On Rosen’s and Adler’s hypotheses in the modern and contemporary visual art market”. *Empirical Economics*, 51(1), p. 415-437. DOI 10.1007/s00181-015-1002-3.
14. Cesario, V., Accogli, E., Domanico, A., DI LASCIO, F.M.L., Napoleone, L., Gasbarri, A., and Arienti, V. (2016). “Percutaneous real-time sonoelastography as a non-invasive tool for the characterization of solid focal liver lesions: A prospective study”. *Digestive and Liver Disease*, 48(2), p. 182-188. DOI 10.1016/j.dld.2015.11.005.
15. DI LASCIO, F.M.L., Giannerini, S. and Reale, A. (2015) “Exploring copulas for the imputation of complex dependent data”. *Statistical Methods & Applications*, 24(1), p. 159-175, DOI 10.1007/s10260-014-0287-2.
16. DI LASCIO, F.M.L. and Roverato A. (2013) “Wilks’ dissimilarity for gene clustering: computational issues”. *Epidemiology, Biostatistics and Public Health*, 10(2), p. e8761-1—e8761-10, DOI: 10.2427/8761.
17. DI LASCIO, F.M.L. and Giannerini, S. (2012) “Clustering Microarray Data: Theoretical and Practical Issues”. *Communications in Statistics - Theory and Methods*, 41(16-17), p. 3211-3232. DOI:10.1080/03610926.2011.654036.
18. DI LASCIO, F.M.L. and Giannerini, S., (2012). “A Copula-Based Algorithm for Discovering Patterns of Dependent Observations”. *Journal of Classification*, 29(1), p. 50-75. DOI: 10.1007/s00357-012-9099-y.
19. DI LASCIO, F.M.L., Giannerini, S. Scorcù, A.E. and Candela, G. (2011) “Cultural tourism and temporary art exhibitions in Italy: a panel data analysis”. *Statistical Methods & Applications*, 20(4), p. 519–542. DOI:10.1007/s10260-011-0175-y.

20. Roverato, A. and DI LASCIO, F.M.L. (2011) "Wilks'  $\Lambda$  Dissimilarity Measures for Gene Clustering: An Approach Based on the Identification of Transcription Modules". *Biometrics*, 67(4), p. 1236–1248 (Paper) and p. 1-8 (Supplementary Materials). DOI: 10.1111/j.1541-0420.2011.01571.x.
21. Pacella, C.M., Francica, G., DI LASCIO, F.M.L. et al., (2009). "Long-Term Outcome Of Cirrhotic Patients With Early Hepatocellular Carcinoma Treated With Ultrasound-Guided Percutaneous Laser Ablation: A Retrospective Analysis". *Journal of Clinical Oncology*, 27(16), p. 2615-2621. DOI: 10.1200/JCO.2008.19.0082.
22. Arienti, V., Pretolani, S. et al., DI LASCIO, F.M.L. (2008). "Complications of Laser Ablation for Hepatocellular Carcinoma: A Multicenter Study". *Radiology*, 246(3), p. 947-55.

Software  
packages

1. DI LASCIO, F.M.L., Gatto A., and Giannerini, S. (2025) "CoImp: parametric and nonparametric copula-based imputation methods" (version 2.1.1), R Software Package available on the CRAN at <http://cran.r-project.org/web/packages/CoImp/index.html>. DOI: 10.32614/CRAN.package.CoImp.
2. DI LASCIO, F.M.L. and Perazzini, S. (2024) "PanelTM: Two- and three-way dynamic panel threshold regression model for change point detection" (version 1.0), R Software Package available on the CRAN at <https://cran.r-project.org/web/packages/PanelTM/index.html>. DOI: 10.32614/CRAN.package.PanelTM.
3. DI LASCIO, F.M.L. and Giannerini, S. (2017) "CoClust: Copula Based Cluster Analysis" (version 0.3-2), R Software Package available on the CRAN at <http://cran.r-project.org/web/packages/CoClust/index.html>. DOI: 10.32614/CRAN.package.CoClust.

Book chapters  
and Paper  
Proceedings

1. Gatto, A., DI LASCIO, F.M.L., and Durante, F. (2025) "Hierarchical Clustering with Missing Data: The Role of Copula-Based Nonparametric Imputation". To be submitted to SMPS 2026.
2. Gatto, A., Perazzini, S. and DI LASCIO, F.M.L. (2025) "Extreme-value copulas: a note on comparing models for tail-risk events", Book of Short Papers of IES 2025 - Innovation & Society: Statistics and Data Science for Evaluation and Quality. Padua: Cleup, p. :1258-1265. Eds. Bocciuzzo G., Bovo E., Manisera M., Salmaso L.. ISBN: 978-88-549-849-4.
3. DI LASCIO, F.M.L., Durante, F., Gatto, A. (2025) "Copula-based hierarchical clustering for complete dependence", in Pollice. A. and Mariani, P. (eds), Italian Statistical Society Series on Advances in Statistics, Methodological and Applied Statistics and Demography II – SIS 2024 Short Papers (Solicited sessions), Ed. p. 519-524, Springer Cham. ISBN: 978-3-031-6434-9-1.
4. DI LASCIO, F.M.L., Pappadà, R. (2024) "Hierarchical Clustering and CoClust Algorithm: A Nested Procedure to Analyse Sustainable Heating Data", In: Ansari, J., et al., Combining, Modelling and Analyzing Imprecision, Randomness and

Dependence. SMPS 2024. Advances in Intelligent Systems and Computing, vol. 1458, p. 85-92. Springer, Cham. ISBN: 978-30-31659-92-8. DOI: 10.1007/978-3-031-65993-5\_10.

5. DI LASCIO, F.M.L., Ibba, P., Perazzini, S., and Petti, L. (2023) “Bioimpedance data analysis to identify electrical frequencies relevant for monitoring fruit ripeness”, in L. Fabbris, S. Mignani, G. Tassinari (eds), Technology and Data Science for Economic and Social Development. Book of Short Papers of the ASA Bologna Conference – Supplement to Volume 35/3 of the Italian Journal of Applied Statistics, p. 201-206. Padua: Cleup. DOI: 10.26398/asaproc.0032.
6. DI LASCIO, F.M.L., and Pappadà, R. (2023) “Cluster analysis and conditional copula: a joint approach to analyse energy demand”, in ClaDaG 2023 - Book of abstracts and short papers, p. 427-430, Eds. Coretto P., Giordano G., La Rocca M., Parrella M.L., Rampichini, C., Pearson. ISBN: 978-88-91935-63-2.
7. DI LASCIO, F.M.L., Durante, F., and Gatto, A. (2023) “Hierarchical percentile clustering to analyse greenhouse gas emissions from agriculture in European Union”, in ClaDaG 2023 - Book of abstracts and short papers, p. 431-434, Eds. Coretto P., Giordano G., La Rocca M., Parrella M.L., Rampichini, C., Pearson. ISBN: 978-88-91935-63-2.
8. DI LASCIO, F.M.L., Perazzini, S. (2022) “Change point detection in fruit bioimpedance using a three-way panel model”, in Book of short papers - SIS2022, p. 1184-1189, Eds. A. Balzanella, M. Bini, C. Cavicchia, R. Verde. Pearson. ISBN: 978-88-91932-31-0.
9. DI LASCIO, F.M.L., Menapace, A., and Pappadà, R. (2021) “Ali-Mikhail-Haq copula to detect low correlations in hierarchical clustering”, in ClaDaG 2021 - Book of abstracts and short papers, p. 324-327, Eds. Porzio, G.C., Rampichini, C., Bocci, C., Firenze University Press. e-ISBN: 978-88-55183-40-6. DOI: 10.36253/978-88-5518-340-6.
10. DI LASCIO, F.M.L., and Perazzini, S. (2021) “Spatial multilevel mixed effects modeling for earthquake insurance losses in New Zealand”, in Book of short papers - SIS2021, p. 1357-1362, Eds. Perna, C., Salvati, N., Schirripa Spagnolo, F. Pearson. ISBN: 978-88-91927-36-1.
11. DI LASCIO, F.M.L., and Menapace, A. (2020) “Analysis of district heating demand through different copula-based approaches”, in Book of short papers - SIS 2020, p. 292-297, Eds. Pollice, A., Salvati, N., and Schirripa Spagnolo, F., Pearson. ISBN: 978-88-91910-77-6.
12. DI LASCIO, F.M.L. (2018) “CoClust: An R Package for Copula-based Cluster Analysis”, in Recent Applications in Data Clustering, p. 93-114. Ed. Harun Pirim, IntTech Publisher. ISBN: 978-17-89235-27-2. DOI: 10.5772/intechopen.74865.
13. DI LASCIO, F.M.L., Durante, F. and Pappadà, R. (2017) “Copula-based clustering methods”, Copulas and Dependence Models with Applications, p. 49-67. Eds Úbeda-Flores, M., de Amo, E., Durante, F. and Fernández Sánchez, J., Springer International Publishing. ISBN: 978-33-19642-20-8.

14. DI LASCIO, F.M.L., Durante, F. and Jaworski, P. (2017) "A Test for Truncation Invariant Dependence", *Soft Methods for Data Science, Series: Advances in Intelligent Systems and Computing*, vol. 456, p. 173-180, Eds. M.B. Ferraro, P. Giordani, B. Vantaggi, M. Gagolewski, M. Ángeles Gil, P. Grzegorzewski, O. Hryniewicz, Springer-Verlag. ISBN: 978-33-19429-71-7. DOI 10.1007/978-3-319-42972-4\_22.
15. DI LASCIO, F.M.L and Giannerini, S. (2015) "CoImp R package: copula-based multivariate imputation", *Proceedings of SIS2015 Statistical Conference: Statistics and Demography: the Legacy of Corrado Gini*, (Treviso, Italy), p. 1-6, ISBN: 978-88-67874-52-1.
16. Rossi L., DI LASCIO, F.M.L, Pacelli B. and Magnani M. (2015) "Descrivere un Social Network Site: un approccio empirico" in Boccia Artieri G. (a cura di), *Gli effetti sociali del web*, FrancoAngeli, Milano, p. 52-62. ISBN 978-88-20417-41-3.
17. DI LASCIO, F.M.L, Giannerini, S. and Reale, A.(2014) "Imputation of complex dependent data by conditional copulas: analytic versus semiparametric approach", *Book of proceedings of the 21st International Conference on Computational Statistics (COMPSTAT 2014)*, p. 491-497. ISBN 978-28-39913-47-8.
18. DI LASCIO, F.M.L. and Giannerini, S. (2013) "A copula-based approach for discovering inter-cluster dependence relationships", *Cladag 2013 - 9th Meeting of the Classification and data Analysis Group - Book of Abstracts*, Editors: T. Minerva, I. Morlini, F. Palumbo, p. 162-165 del volume in pdf (p. 1-4). ISBN 978-88-67871-17-9.
19. Candela, G., DI LASCIO, F.M.L., Giannerini, S. and Scorcu, A.E. (2013) "L'impatto dell'offerta culturale temporanea sui flussi turistici" in *Percorsi creativi di turismo urbano - Beni culturali e riqualificazione nella città contemporanea*. a cura di Cusimano G., Mercatanti L., Porto C.M.. Patron, Bologna, p. 58-71, ISBN: 978-88-55532-43-3.
20. DI LASCIO, F.M.L. (2010) "Analyzing the Dependence Structure of Microarray Data: a Copula-based Approach". *Book of short papers of PhD Theses in Statistics and Applications*, vol. 1, p. 53-57, Cleup, Padova, ISBN/ISSN: 978-88-61295-20-9.
21. Celli, F. DI LASCIO, F.M.L. Magnani, M. Pacelli, B. and Rossi, L. (2010) "Social Network Data and Practices: The Case of Friendfeed". *Advances in Social Computing*, (Eds: Chai, S.K., Salerno, J., Mabry, P.) vol. 6007, p. 346-353. Series: *Lecture Notes in Computer Science*, Springer Berlin. ISBN: 978-36-42120-78-7. DOI: 10.1007/978-3-642-12079-4\_43.
22. DI LASCIO, F.M.L. and Roverato, A. (2010) "Comparison of correlation-based dissimilarity measures for clustering genes with DAG structure". *Proceedings of CIBB 2010 – Seventh International Meeting on Computational Intelligence methods for Bioinformatics and Biostatistics – Palazzo Comitini, Palermo (Italy)*. September 16th-18th, 2010, p. 1-9, USB stick with ISBN: 978-88-95272-87-0.
23. DI LASCIO, F.M.L. and Roverato, A. (2010) "Partial ordering of dissimilarity measures for gene clustering". *Proceedings of the 45th Scientific Meeting of the Italian Statistical Society (SIS) – University of Padua (Italy)*. June 16th-18th, 2010. p. 1-8, USB stick with ISBN 978-88-61295-66-7.

24. Roverato, A. and DI LASCIO, F.M.L. (2009) "Clustering variables with DAG structure", Proceedings of the Workshop S.Co. 2009 - Complex Data Modeling and Computationally Intensive Statistical Methods for Estimation and Prediction (Editors: Paganoni, A.M., Sangalli, L.M., Secchi, P., Vantini, S.), Maggioli Editore, Santarcangelo di Romagna (RN), p. 369-374, ISBN 978-88-38743-85-1
25. Bianchi, G., DI LASCIO, F.M.L., Giannerini, S., Manzari, A., Reale, A. and Ruocco, G. (2009) "Exploring copulas for the imputation of missing nonlinearly dependent data", Book of Short Papers of Classification and Data Analysis 2009, (Editors: Salvatore Ingrassia and Roberto Rocci), Seventh Meeting of the Classification and Data Analysis Group of the Italian Statistical Society (Cladag), Cleup. Padova, p. 429-432, ISBN: 978-88-61294-06-6.
26. DI LASCIO, F.M.L. (2006). "A New Starting Point to Analyze the Nonlinear Time Series: the Nonlinear ARMA Doubly Stochastic and State Dependent Models". Proceedings of 5a Annual International Conference on Statistics, Mathematics and Related Fields, Honolulu (Hawaii), January 16th–18th, 2006, p. 1-18 (p. 453-470 pdf) ISSN: 1550-3747.

#### PhD thesis

DI LASCIO, F.M.L. (2008). "Analyzing the Dependence Structure of Microarray Data: a Copula-Based Approach". Ph.D. dissertation. AMS Collection – AlmaDL-University of Bologna, Italy.

#### Works in progress and working papers

1. DI LASCIO, F.M.L. and Gatto A. (202x) "A nonparametric copula-based imputation method". Minor revision to be sent.
2. DI LASCIO, F.M.L. and Perazzini, S. (202x) "A three-way dynamic panel threshold regression model for change point detection in bioimpedance data". Major revision to be sent.
3. DI LASCIO, F.M.L. and Perazzini, S. (202x) "Directional cross-dependence analysis for spatio-temporal data".
4. DI LASCIO, F.M.L., Larcher, M., Gatto, A., and Perazzini, S. (202x) "A flexible binary generalized extreme value model to analyze rare debris flows in South Tyrol".
5. DI LASCIO, F.M.L., Perazzini, S., and Rossini, L. (202x) "Nonparametric clustering for spatial data with an application to earthquake insured losses".

#### Talks (selection)

Di Lascio, F.M.L. "A nonparametric copula-based imputation method", at the 16th Workshop on Stochastic Models, Statistics and Their Applications (SMSA), Würzburg, Germany, March 18th-20th, 2026. Invited talk. In progress.

Di Lascio, F.M.L. "Hierarchical Clustering and CoClust Algorithm: A Nested Procedure to Analyse Sustainable Heating Data", at the 11th International Conference on Soft Methods in Probability and Statistics (SMPS), Salzburg, Austria, September 3rd-6th, 2024. Invited talk.

“A nonparametric copula-based approach for imputation of dependent data”, at the 16th International Conference of the ERCIM (European Research Consortium for Informatics and Mathematics) working group on Computational and Methodological Statistics (CMStatistics 2023), HTW Berlin, University of Applied Sciences, Berlin, Germany, December 16th-18th, 2023. Invited talk. Presented by A. Gatto due to maternity leave.

“Cluster analysis and conditional copula: a joint approach to analyse energy demand”, 14th Scientific Meeting of the Classification and Data Analysis Group (CLADAG2023) - University of Salerno “Fisciano Campus”, Salerno (Italy), September 11th-13th, 2023. Invited talk. Presented by R. Pappdà due to maternity leave.

“Three-way dynamic panel threshold model for change point detection”, European Conference on Data Analysis (ECDA2022), Napoli (Italy), September 14th-16th 2022. Invited talk.

“Analysing the relationship between district heating demand and weather conditions through conditional mixture copula”, 24th International Conference on Computational Statistics (COMPSTAT2022), University of Bologna, Italy, August 23rd-26th, 2022. Invited talk.

“Ali-Mikhail-Haq copula to detect low correlations in hierarchical clustering”, 13th Scientific Meeting of the Classification and data analysis group (CLADAG2021), University of Firenze, Italy, September 9th-11th, 2021.

“Analysing the relationship between district heating demand and weather conditions through conditional mixture copula”, 63rd World Statistical Congress of the International Statistical Institute (ISI2021), The Netherland, July 11th-16th, 2021.

“Spatial multilevel mixed effects modeling for earthquake insurance losses in New Zealand”, 50th Scientific Meeting of the Italian Statistical Society (SIS2021), Virtual conference, June 21st-25th, 2021.

“Analysis of district heating demand through different copula-based approaches”, 50th Scientific Meeting of the Italian Statistical Society (SIS2020), University of Pisa, Italy, June 22nd-24th, 2020 (canceled due to Covid-19). Invited talk.

“Analysing the Relationship between District Heating Demand and Weather Conditions through Conditional Copula”, 10th International Workshop on Simulation and Statistics, University of Salzburg, Austria, September 2nd-6th, 2019. Invited talk.

“Joint and conditional dependence modelling of district heating demand and weather conditions: a copula-based approach”, 3rd Internal Workshop on Economics and Econometrics, Faculty of Economics and Management, Free University of Bozen-Bolzano, June 14th, 2019.

“Joint and conditional dependence modelling of district heating demand and weather conditions: a copula-based approach”, Fifth conference of the Deutsche Arbeitsgemeinschaft Statistik (DAGStat), Department of Statistics Ludwig-Maximilians University Munich, Germany, March 18th-22th, 2019.

“Joint and conditional dependence modelling of district heating demand and weather conditions: a copula-based approach”, 14th Workshop on Stochastic Models, Statistics and their Application (SMSA), Technische Universität Dresden (TUD), Germany, March 6th-8th, 2019. Invited talk.

“La parità di genere nel mondo del lavoro: Italia ed Europa a confronto”, Conference on “Lavoro e pari opportunità: i dati di Laives”, Free University of Bozen-Bolzano, Faculty of Economics and Management, Italy, January 14th, 2019.

“Analysis of peak district heating demand through copula function”, Workshop on Energy Economics, Free University of Bozen-Bolzano, Bozen-Bolzano, Italy, July 5th-6th, 2018.

“Copula-based statistical methods and their software implementation”, Internal workshop, Free University of Bozen-Bolzano, Bozen-Bolzano, Italy, June 21st, 2017.

“Imputation of complex dependent data: a copula-based approach”, Conference on Innovations in Insurance, Risk- and Asset Management, KPMG Center of Excellence in Risk Management, Garching-Hochbrück, Munich, Germany, April 5th-7th, 2017.

“A conditional copula-based technique to impute complex multivariate dependent data”, 13th Workshop on Stochastic Models, Statistics and Their Applications, Humboldt University of Berlin, Berlin, Germany, February 20th-24th, 2017. Invited talk.

“A conditional copula-based imputation technique”, Salzburg Workshop on Dependence Models & Copulas, Salzburg, Austria, September 19th-21st, 2016. Invited talk.

“A conditional copula-based technique to impute complex dependent data”, Workshop on Applied Statistics, Technische Universität Dresden, Dresden, Germany, March 10th-11th, 2016. Invited talk.

“CoImp: a copula-based imputation method”, IWS2015 - Eight International Workshop on Simulation, Wien, Austria, September 21st-25th, 2015.

“CoImp R package: copula-based multivariate imputation”, SIS2015 Statistical Conference: Statistics and Demography: the Legacy of Corrado Gini, Treviso, Italy, September 9th-11th, 2015.

“A conditional copula-based technique to impute complex dependent data”, 7th International Conference of the ERCIM (European Research Consortium for Informatics and Mathematics) Working Group on Computational and Methodological Statistics, Pisa, Italy, December 6th-8th, 2014.

“Validation methods for copula-based clustering algorithm”, Workshop on “Clustering methods and their applications”, Free University of Bozen-Bolzano, Italy, November 28th, 2014.

“Food Consumption Patterns of European Countries: An Application of the Co-Clust Algorithm”. Annual Meeting of the Austrian Statistical Society (ÖSG) 2014, Innsbruck, Austria, September 10th-12th, 2014.

“Imputation of complex dependent data by conditional copulas: analytic versus semi-parametric approach”. 21st International Conference on Computational Statistics - COMPSTAT 2014, Geneve, Switzerland, August 19th-22th, 2014.

“Clustering microarray data: an approach based on copula function”. Workshop “Mathematical and statistical models for genetic coding”, Mannheim University of Applied Science, Institute for Applied Mathematics, Mannheim, Germany. September 26th-28th, 2013. Invited talk.

“A copula-based approach for discovering inter-cluster dependence relationships”. 9th Scientific Meeting of the Classification and Data Analysis Group of the Italian Statistical Society (CLADAG13), University of Modena and Reggio Emilia, Italy. September 18th-20th, 2013. Invited talk.

“A copula-based approach for discovering inter-cluster dependence relationships”. Workshop “Copula modeling: New challenges and techniques”, KPMG Center of Excellence in Risk Management, Garching-Hochbrück, Munich, Germany. September 9th, 2013. Invited talk.

“A copula-based approach for discovering inter-cluster dependence relationships”. Seventh International workshop on Simulation, University of Bologna, Rimini, Italy. May 21st-25th, 2013. Specialized session.

“A Copula-Based Algorithm for Discovering Patterns of Dependent Observations”. Poster session, Conference on Evolutionary Computation and Time Series - Villa Mondragone, Monte Porzio Catone, Roma, Italy. June 13th-14th, 2011.

“Comparison of correlation-based dissimilarity measures for clustering genes with DAG structure”. Seventh International Meeting on Computational Intelligence methods for Bioinformatics and Biostatistics (CIBB 2010) – Palazzo Comitini, Palermo, Italy. September 16th-18th, 2010.

“Turismo, cultura e territorio”. Conference on “Eventi, turismo, sviluppo del territorio”, Fondazione Cassa dei Risparmi di Forlì and Association Civita, Musei di San Domenico, Forlì, Italy. June 19th, 2010.

“Partial ordering of dissimilarity measures for gene clustering”. 45th Scientific Meeting of the Italian Statistical Society (SIS), University of Padua, Italy. June 16th-18th, 2010.

“Flussi turistici e offerta culturale”. Research fellow day, University of Bologna, Rimini, Italy, March 23rd, 2010.

“Clustering variables with DAG structure”, Sixth Conference on Complex Data Modeling and Computationaly Intensive Statistical Methods for Estimation and Prediction (S.Co.09), Laboratory for Modeling and Scientific Computing MOX - Politecnico of Milan, Italy, September 14th-16th, 2009. Invited talk.

“Exploring copulas for the imputation of missing nonlinearly dependent data”, Seventh Scientific Meeting of the CLAssification and Data Analysis Group of the Italian Statistical Society (Cladag09), University of Catania, Italy, September 9th-11th, 2009.

“Gli indizi che motivano una ricerca” in “Flussi turistici e offerta culturale: la valutazione empirica della capacità di attrazione turistica dell’arte classica, moderna e contemporanea” with Battilani P., Candela G., Giannerini S. e Scorci A.E., Dep.to of Economics and quantitative methods, University of Catania, Italy, June 5th, 2009.

“A new copula-based clustering algorithm”. XLIV Scientific meeting of the Italian Statistical Society (SIS), University of Calabria, Arcacavata Campus, (CS), Italy, June 25th-27th, 2008.

“Nonlinear ARMA doubly stochastic and state dependent models: a new general approach to nonlinear time series analysis”. 30a Conference on Stochastic Processes and their Applications, University of California, Santa Barbara, California, USA, June 26th - July 1st, 2005.

## Supervision of young scholars

2025-2026 Supervisor of the scientific collaborator dr. Selene Perazzini. Project's title "Extreme events in mountain environments (EXTREME)".

2024-2025 Supervisor of the research assistant dr. Selene Perazzini. Project's title "Modelling Non-standard data and Extremes in Multivariate Environmental Time series (MNEMET)".

2024-2025 Supervisor (with Greta Goracci) of the research assistant dr. Patrick Osatohanmwen. Project's title "Statistical methods for analysing environmental extreme events (EXTREME)".

2023-2026 Supervisor of the research assistant dr. Aurora Gatto. Project's title "Statistical methods for big data analysis in the context of climate adaptation of agricultural and forestry systems (AGRITECH - Spoke 4)".

2022-2023 Supervisor (with D. Ferrari) of the research assistant dr. Norman Fauster. Project's title "Evaluation UNIBZ Services".

2021-2022 Supervisor of the research assistant dr. Selene Perazzini. Project's title "New directions in statistical methods for bio-impedance analysis of fruit ripeness (BIOFRUIT)".

2018-2020 Co-Supervisor of the PhD student Andrea Menapace, Faculty of Science and Technology, Free University of Bozen-Bolzano, Italy.

## Organized conferences, specialized sessions and schools

Organizer of the invited/solicited session on "Recent developments in copula theory and dependence modeling" at the 53rd SIS and 1st FENStatS Scientific Meetings, Sapienza University of Rome (Italy), June 22nd–25th, 2026. In progress.

Organizer of the invited session on "Spatio-temporal dependence and copula models" at the 19th International Joint Conference CFE-CMStatistics 2025 (Computational and Financial Econometrics - Computational and Methodological Statistics), King's College London (UK), December 13th-15th, 2025.

Member of the scientific committee and session chair of the final workshop of PRIN project 2022 MNEMET on "Modelling Non-standard data and Extremes in Multivariate Environmental Time series" at the Department of Economics, Business, Mathematics and Statistics "B. de Finetti", University of Trieste (Italy), September 29th, 2025.

Organizer (with R. Pappadà) of the invited session on "Risk modeling and analysis of extreme events" at the 16th International Conference of the ERCIM working group on Computational and Methodological Statistics (CMStatistics 2023), University of Applied Sciences, Berlin (Germany), December 16th-18th, 2023.

Member of the scientific committee and session chair of the workshop "Workshop on statistical learning and econometrics", Free University of Bozen-Bolzano, 12th-13th December, 2022.

Member of the organizing committee of the "Progetto to-B" for the workshop "Prevenzione oncologica femminile tra scelta consapevole e spinta gentile", Università di Modena e Reggio-Emilia e dell'Azienda USL-IRCCS di Reggio Emilia, 23rd September, 2022.

Organizer of the invited session on “Clustering methods and copula function”, 24th International Conference on Computational Statistics (COMPSTAT), University of Bologna, 23rd-26th August, 2022.

Organizer (with D. Ferrari, C. Agostinelli, and N. Umlauf) of the 2nd Euregio Summer School in “Data Science and Statistics”, Euregio project, University of Innsbruck, Austria. Postponed to 2022.

Member of the scientific program committee of the 13th Scientific Meeting of the CLAssification and Data Analysis Group (CLADAG), University of Firenze, 9th-11st September, 2021.

Organizer of the special session on “Copulas in time series analysis”, 13th Scientific Meeting of the CLAssification and Data Analysis Group (CLADAG), University of Firenze, September 9th-11st, 2021.

Organizer (with M. Nai Ruscone) of the special session on “Clustering of multivariate dependent data” at the 13th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2020), King’s College London, UK, December 19th-21st, 2020.

Organizer (with D. Ferrari, F. Ravazzolo, A. Hamel, and C. Di Caterina) of the Workshop on “Learning tools and applied quantitative methods for decision making”, Free University of Bozen-Bolzano, Italy, December 9th-11th, 2020.

Member of the organizing and scientific committee of the Webinar “Progetto to-B in ricordo di Barbara Pacelli - La salute delle popolazioni vulnerabili”, Regione Emilia-Romagna, Bologna, 28th September, 2020.

Organizer of the special session on “Clustering of multivariate dependent data” at the 12th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2019), Senate House, University of London, UK, December 14th-16th, 2019.

Organizer (with D. Ferrari, C. Agostinelli, and N. Umlauf) of the 1st Euregio Summer School in “Data Science for the Social Sciences”, Euregio project, Free University of Bozen-Bolzano, Bolzano, Italy, August 28th-31st, 2019.

Principal organizer of the 2nd School on “Data Analysis and Programming with R”, Free University of Bozen-Bolzano, Bolzano, Italy, August 26th-28th, 2019.

Organizer of the Meeting on “Lavoro e pari opportunità: i dati di Laives”, Free University of Bozen-Bolzano, Faculty of Economics and Management, Italy, January 14th, 2019.

Organizer of the special session on “Clustering of multivariate dependent data” at the 11th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2018), University of Pisa, Italy, December 14th-16th, 2018.

Member of the Organizing Committee of the “Energy Finance Christmas Workshop (EFC18)”, Free University of Bozen-Bolzano, Faculty of Economics and Management, Italy, December 12th-14th, 2018.

Principal Organizer of the 2nd Workshop on “Clustering methods and their applications (CMA2018)”, Free University of Bozen-Bolzano, Faculty of Economics and Management, Italy, October 26th, 2018.

Organizer of the special session on “Clustering” at the 1st CRoNoS Workshop on Multivariate Data and Software, Poseidonia Beach Hotel, Limassol, Cyprus, April 3rd-5th, 2018.

Organizer of the special session on “Cluster analysis with R” at the 10th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2017), Senate House, University of London, UK, December 16th-18th, 2017.

Organizer (with C. Agostinelli, P.L. Novi Inverardi and A. Zeileis) of the R school “R: Economics in ACTION” (REACTION), Euregio project, University of Trento, Povo scientific campus, Trento, Italy, September 5th-8th, 2017.

Organizer (with Prof. F. Durante) of the special session on “Dependence-based clustering methods” at the 9th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2016), University of Seville, Spain, December 9th-11th, 2016.

Organizer of the special session on “Dependence models in biostatistics and bioinformatics” at the 8th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2015), Senate House, University of London, UK, December 12th-14th, 2015.

Principal Organizer of the R school “Data analysis and programming with R”, Free University of Bozen-Bolzano, Faculty of Economics and Management, Italy, November 18th-20th, 2015.

Webmaster of the school “Bolzano-Bozen Risk School”, Free University of Bozen-Bolzano, Faculty of Economics and Management, Italy, September 22nd-23rd, 2015.

Principal Organizer of the 1st Workshop on “Clustering methods and their applications”, Free University of Bozen-Bolzano, Faculty of Economics and Management, Italy, November 28th, 2014.

Organizer (with Prof. F. Durante) of the special session on “Dependence Models” at 21st International Conference on Computational Statistics, International Conference Centre Geneva, Geneva (Switzerland), August 19th-22th, 2014.

Member of the Organizing Committee of the Workshop “Dependence Models and Risk”, Free University of Bozen-Bolzano, School of Economics and Management, Italy, May 27th, 2014.

Member of the Organizing Committee of the Workshop “Research Evaluation”, Free University of Bozen-Bolzano, School of Economics and Management, Italy, May 10th, 2013.

Executive committee of the Final Workshop PRIN/COFIN 2002 on “Statistical Inference on the Stochastic and Deterministic Dynamics of Observed Time Series”, Bressanone, Italy, June 9th-11th, 2005.

## Editorial activity

01.01.2022 – Associate Editor of the international journal “Statistical Methods & Applications Pres (SMA) - section Methods” (<https://www.springer.com/journal/10260/>).

01.2015 – Assistant Editor of the international journal “Dependence Modeling” (<http://www.degruyter.com/view/j/demo>).

12.2017

## Referee Activity

Referee Statistics and Computing, Computational Statistics and Data Analysis, Journal of the Royal Statistical Society - Series C, Econometrics and Statistics, Computational Statistics, International Statistical Review, Environmental and Ecological Statistics, Statistical Methods and Applications, Statistical Papers, Journal of Applied Statistics, Dependence Modeling, AStA Advances in Statistical Analysis, Austrian Journal of Statistics, Biometrical Journal, COMPSTAT, ClaDAG, Quality & Quantity, Statistica.

Reviewer Mathematical Reviews (2017-2020).

## Research grants and other funding received

### PRIN and PNRR

2023 – 2025 Associated investigator (Local PI) of the National PRIN Project “Modelling Non-standard data and Extremes in Multivariate Environmental Time series (MNEMET)”. PI: Prof. R. Pappadà. Budget: 253.775 euro.

2022 – 2025 Member of the Agritech National Research Center and received funding from the European Union Next-Generation EU (Piano Nazionale Di Ripresa e Resilienza (PNRR) – (Missione 4 Componente 2, Investimento 1.4 – D.D. 1032 17/06/2022, CN00000022) - Task 4.2.3, “Big data analysis and decision support systems for the climate adaptation of agriculture and forestry”, Task leader: UNIBZ, Responsible: Prof. F. Mazzetto. Budget UNIBZ: 2.048.694,00 euro.

2020 – 2023 Member of the National PRIN Project (Ex 40%) “Hi-Di NET: Econometric Analysis of High Dimensional Models with Network Structures in Macroeconomics and Finance”. PI: Prof. M. Billio. Budget: 1.115.490,00 euro.

2008 – 2010 Member of the National PRIN Project (Ex 40%) “Statistical methods for learning in clinical research”. Coordinator: Prof. M. Gasparini. Budget: 41.126 euro.

2008 – 2010 Member of the National PRIN Project (Ex 40%) “Metodi di calcolo evolutivo in Statistica”. Coordinator: Prof. F. Battaglia. Budget: 52.315 euro.

2005 – 2006 Member of the National Murst Project (Ex 40%) “Parametric and non parametric estimation and forecasting of time series conditional moment dynamics”. Coordinator: Prof. E. Bee Dagum. Budget: 65.000 euro.

### ISTAT

2010 – 2012 Member of the scientific group for the project “New methods to impute missing data by using copula functions”, Agreement between the National Institute for Statistics (ISTAT) and the Department of Statistical Science, University of Bologna, Italy. Budget for the UNIBO: 30.000 euro.

### UNIBZ - Province of Bozen-Bolzano

2026 – 2028 Co-Investigator of the research project: “Integrated Modelling for an Enhanced Assessment of Debris-Flow Hazards in South Tyrol under Climate Change”, 6th call for Research, in collaboration with the Faculty of Agricultural, Environmental and Food Sciences. Project partners: Dept. of Civil, Environmental and Mechanical Engineering - University of Trento and the Center for Climate Change and Transformation - EURAC. PI of the project: Alexandre Dunant. PI of UNIBZ: Prof. M. Larcher. Budget (entire consortium): 500.000 euro. Submitted.

2022 – 2026 Co-Investigator of the research project: “EXTReMe Events in Mountain Environments (EXTREME)”, RC call 2022, in collaboration with the Faculty of Science and Technology, Free University of Bozen-Bolzano (Italy). PI: Prof. M. Larcher. Budget: 120.000 euro.

2020 – 2023 Co-Investigator of the research project: “New directions in statistical methods for bio-impedance analysis of fruit ripeness (BIOFRUIT)”, ID call 2020, in collaboration with the Faculty of Science and Technology, Free University of Bozen-Bolzano (Italy). PI: Dr. L. Petti. Budget: 100.000 euro.

2020 – 2023 Member of the research project: “Detecting and quantifying (side-)effects of recent experimental therapies against Chronic Myeloid Leukemia”, ID call 2020, in collaboration with the Faculty of Computer Science, Free University of Bozen-Bolzano (Italy). PI: Dr. P. Lecca. Budget: 82.000 euro.

2019 – 2023 Member of the research project: “Techno-economic methodologies to investigate sustainable energy scenarios at urban level (TESES-Urb)”, ID call 2019, in collaboration with the Faculty of Science and Technology, Free University of Bozen-Bolzano (Italy). PI: Prof. M. Righetti. Budget: 182.500,00 euro.

2018 – 2020 Principal Investigator of the research project “The use of Copula for the Analysis of Complex and Extreme Energy and Climate data (CACEEC)”, Internal call, Free University of Bozen-Bolzano (Italy). Budget: 7.000 euro.

2018 – 2021 Member of the research project “HHigh-Performance statistical methods for Spatio-Temporal Environmental and econometRic data (HIPSTER)”, ID call 2018, in collaboration with the Faculty of Science and Technology, Free University of Bozen-Bolzano (Italy). PI: Prof. D. Ferrari. Budget: 80.000 euro.

2018 – 2021 Member of the research project “REliable ASsessment of the Selection Uncertainty for statistical models by REsampling (REASURE)”, Start-up fund, Free University of Bozen-Bolzano (Italy). PI: Prof. D. Ferrari. Budget: 50.000 euro.

2017 – 2019 Member of the research project “Forecasting and Monitoring Electricity Prices and Volumes”, Free University of Bozen-Bolzano (Italy). PI: Dr. A. Gianfreda. Budget: 9.000 euro.

2016 – 2018 Co-Investigator of the research project “New Directions in Dependence Modeling (NEW-DEMO)”, CRC call 2016, Free University of Bozen-Bolzano (Italy). PI: Prof. F. Durante (until 30/12/2016) and F. Ravazzolo (from 31/12/2016). Budget: 37.500 euro.

2016 – 2018 Principal Investigator of the research project “Aggregation functions for Innovation and Data Analysis (AIDA)”, CRC call 2016, Free University of Bozen-Bolzano (Italy). PI: Prof. F. Durante until 29/12/2016, Prof. A. Weissensteiner from 30/12/2016 until 31/01/2018. Budget: 38.000 euro.

2015 – 2018 Member of the research project “Positive heuristics and entrepreneurial team decision making (PH)”. Faculty of Economics and Management. PI: Dr. E. Villani. Budget: 99.000 euro.

2014 – 2017 Principal Investigator of the project “Correlation, Clustering, and Copulas: Detecting association in multivariate data (COCCO)”. (PI: Prof. F. Durante until 30/12/2016). Budget: 9.900 euro.

2013 – 2016 Principal Investigator of the Individual project “Multivariate analysis techniques based on copula function”. Budget: 4.300 euro.

2013 – 2016 Member of the research project “Modelling multivariate dependence and extremes (MODEX)”. PI: Prof. F. Durante. Budget: 20.000 euro.

### **EUREGIO Mobility Fund**

2019 – 2020 Member of the project “Second Euregio Summer School in Data Science and Statistics” for the organization of a school at the University of Innsbruck, Austria, 2020. Coordinator: Nikolaus Umlauf, University of Innsbruck, Austria. Partner n. 1: Claudio Agostinelli, University of Trento, Italy. Partner n. 2: Davide Ferrari, Free University of Bozen-Bolzano, Italy. Budget: 7.940 euro.

2018 – 2019 Member of the project “First Euregio Summer School in Data Science and Statistics for the Social Sciences” for the organization of a school at the Free University of Bozen-Bolzano, Italy, 2019. Coordinator: Davide Ferrari, Free University of Bozen-Bolzano, Italy, Partner n. 1: Claudio Agostinelli, University of Trento, Italy. Partner n. 2: Nikolaus Umlauf, University of Innsbruck, Austria. Budget: 7.920 euro.

2016 – 2017 Partner n. 1 of the project “R: Economics in ACTION (REACTION)” for the organization of a school at the University of Trento, Povo scientific campus, Trento, Italy, September 5th-8th, 2017. Coordinator: Claudio Agostinelli, University of Trento, Italy, Partner n. 2: Achim Zeileis, University of Innsbruck, Austria. Budget: 9.680 euro.

### **DAAD**

2016 – 2017 Member of the research project “Copula Function and Application in Pricing of Structured Credit Derivative by Embedding of Advanced Clustering Algorithm”, Department of Econometrics and Statistics, esp. Transportation in Institute for Transport & Economics of Technische Universität Dresden (TUD) - German Academic Exchange Service (DAAD). Leading professors: Ostap Okhrin (TUD), Fabrizio Durante (UNIBZ). Budget: 2.322 euro.

## **Key international academic collaborators**

Prof. Ilan Noy, Victoria University of Wellington, Wellington, New Zealand.

Sen. Scient. Sebastian Fuchs, University of Salzburg, Austria.

Prof. Piotr Jaworski, University of Warsaw, Poland.

## **Main scientific collaborations**

2013, 2015 PRISMA SRL for econometric and statistical analysis of data.

2005–2007, Italian Group of Ultrasonography (GIUMI) - Maggiore Hospital of Bologna, Italy 2016, 2018 for statistical analysis of data.

## **Teaching Experience**

### **a.y. 2025/2026 Lecturer**

1. “Time Series Analysis and Forecasting”, M1 module of Econometrics for data science (teaching language: English), together with F. Ravazzolo, EDUNEXT course (videos recording + in-class sessions), Master in Data Analytics for Economics and Management, Faculty of Economics and Management, Free University of Bozen–Bolzano.

2. "Statistics for EPE (Economics, Politics and Ethics)", (teaching language: Italian), Bachelor in Economics, Politics and Ethics, Faculty of Economics and Management, Free University of Bozen–Bolzano.
3. "Data Science for Social Sciences", (teaching language: Italian), Bachelor in Economics, Politics and Ethics, Faculty of Economics and Management, Free University of Bozen–Bolzano.

a.y. 2024/2025 **Lecturer**

1. "Time Series Analysis and Forecasting", M1 module of Econometrics for data science (teaching language: English), Master in Data Analytics for Economics and Management, Faculty of Economics and Management, Free University of Bozen–Bolzano.
2. "Statistics for EPE (Economics, Politics and Ethics)", (teaching language: Italian), Bachelor in Economics, Politics and Ethics, Faculty of Economics and Management, Free University of Bozen–Bolzano.
3. "Data Science for Social Sciences", (teaching language: Italian), Bachelor in Economics, Politics and Ethics, Faculty of Economics and Management, Free University of Bozen–Bolzano.

a.y. 2023/2024 **Lecturer**

1. "Economic Statistics" (with Jan Ditzen), M2 module of Statistics for the Public Sector (teaching language: English), Master in Public Policies and Administration, Faculty of Economics and Management, Free University of Bozen–Bolzano.

a.y.s 2022–2023 **Lecturer**

and 2021–2022

1. "Basic statistical and econometrics methods", Module 2: "Multivariate statistical methods", PhD program in Economics and Finance and PhD program in Management and Economics, Faculty of Economics and Management, Free University of Bozen–Bolzano, in conjunction with the PhD in Economics and Management, Doctoral School of Social Sciences, University of Trento.
2. "Statistics for SES (Economics and Social Sciences)", (Frontal Lectures and Exercises), Bachelor in Economics and Social Sciences (L-33), Faculty of Economics and Management, Free University of Bozen–Bolzano.
3. "Statistics", Bachelor in Economics and Management (L-18), Faculty of Economics and Management, Free University of Bozen–Bolzano.

a.y. 2020–2021 **Lecturer**

1. "Quantitative research methods" (29022), (with F. Ravazzolo and S. Stillman), PhD program in Management and Economics, Faculty of Economics and Management, Free University of Bozen–Bolzano.
2. "Statistics of the Public Sector, M-1 Introduction to statistical methods", Master in Public Policies and Administration (LM-63), Faculty of Economics and Management, Free University of Bozen–Bolzano.
3. "Statistics for SES (Economics and Social Sciences)", (Frontal Lectures and Exercises), Bachelor in Economics and Social Sciences (L-33), Faculty of Economics and Management, Free University of Bozen–Bolzano.

a.y.s 2019–2020 **Lecturer**

and 2018–2019

1. "Quantitative research methods" (29022), (with F. Ravazzolo and S. Stillman), PhD program in Management and Economics, Faculty of Economics and Management, Free University of Bozen–Bolzano.
2. "Statistics of the Public Sector, M-1 Introduction to statistical methods", Master in Public Policies and Administration (LM-63), Faculty of Economics and Management, Free University of Bozen–Bolzano.
3. "Statistics for SES (Economics and Social Sciences)", Bachelor in Economics and Social Sciences (L-33), Faculty of Economics and Management, Free University of Bozen–Bolzano.

a.y.s 2017–2018 **Lecturer**

and 2016–2017

1. “Statistics of the Public Sector, M-1 Introduction to statistical methods”, Master in Economics and Management of the Public Sector (LM-63), Faculty of Economics and Management, Free University of Bozen–Bolzano.
2. “Statistics”, Bachelor in Economics and Management (L-18), Faculty of Economics and Management, Free University of Bozen–Bolzano.

### **Lecturing assistant**

“Statistics for SES”, Bachelor in Economics and Social Sciences (L-33), Faculty of Economics and Management, Free University of Bozen–Bolzano.

a.y. 2015–2016 **Lecturer**

1. “Analytics and Data Science in Economics and Management I”, PhD program in Computer Science and System Engineering, School for Advanced Study - IMT, Lucca, Italy.
2. “Statistics of the Public Sector, M-1 Introduction to statistical methods”, Master in Economics and Management of the Public Sector (LM-63), Faculty of Economics and Management, Free University of Bozen–Bolzano.
3. “Statistics”, Bachelor in Economics and Management (L-18), Faculty of Economics and Management, Free University of Bozen–Bolzano.

### **Lecturing assistant**

“Statistics for SES”, Bachelor in Economics and Social Sciences (L-33), Faculty of Economics and Management, Free University of Bozen–Bolzano.

a.y. 2014–2015 **Lecturer**

1. “Statistics of the Public Sector, M-1 Introduction to statistical methods”, Master in Economics and Management of the Public Sector (LM-63), Faculty of Economics and Management, Free University of Bozen–Bolzano.
2. “Statistics”, Bachelor in Economics and Management (L-18), Faculty of Economics and Management, Free University of Bozen–Bolzano.

### **Lecturing assistant**

“Statistics for SES”, Bachelor in Economics and Social Sciences (L-33), Faculty of Economics and Management, Free University of Bozen–Bolzano.

a.y. 2013–2014 **Lecturer**

1. “Statistics of the Public Sector, M-1 Introduction to statistical methods”, Master in Economics and Management of the Public Sector (LM-63), Free University of Bozen–Bolzano, School of Economics and Management.
2. “Statistics”, Bachelor in Economics and Management (L-18), Free University of Bozen–Bolzano, School of Economics and Management.

a.y. 2012–2013 **Lecturer**

1. “Statistics”, Bachelor in Economics and Management (L-18), Free University of Bozen–Bolzano, School of Economics and Management.
2. “Statistics for SES”, Bachelor in Economics and Social Sciences (L-33), Free University of Bozen–Bolzano, School of Economics and Management.

### **E-learning Teaching Assistant**

“Statistics”, University of Bologna, Rimini Campus Branch, Italy.

from 2006–2007 **Teaching assistant**

to 2011–2012

1. “Statistics”, Bachelor in Business and Economics, Faculty of Economics, University of Bologna, Italy. Supervisor: Prof. A. Roverato. a.y. 2011/12
2. “Applied Statistics”, (Second cycle) Bachelor in Economics and Law, Faculty of Economics, University of Bologna, Italy. Supervisor: Prof. A. Roverato. a.y.s 2011/12, 2010/11, 2009/10, 2008/09

3. "Statistics", Bachelor in Economics and Management, Faculty of Economics, University of Bologna, Italy. Supervisor: Dr. M. Lupparelli. a.y. 2011/12
4. "Time series analysis", Bachelor in Statistical Sciences, Faculty of Statistical Sciences, University of Bologna, Italy. Supervisor: Prof. M. Pillati. a.y.s 2010/11, 2009/10
5. "Applied Statistics", Bachelor in Economics, Faculty of Economics, University of Bologna, Rimini Campus Branch, Italy. Supervisor: Dr. S. Giannerini. a.y. 2010/11
6. "Statistics for tourism", Bachelor in Tourism Economics, Faculty of Economics, University of Bologna, Rimini Campus Branch, Italy. Supervisor: Dr. P. Foschi. a.y. 2010/11
7. "Statistics", Bachelor in Economics, Faculty of Economics, University of Bologna, Italy. Supervisor: Dr. P. Bortot. a.y.s 2010/11, 2009/10
8. "Elements of statistics and computer sciences", Bachelor in International cooperation, Faculty of Political sciences, University of Bologna, Italy. Supervisor: Prof. M. Pillati. a.y. 2009/10
9. "Multivariate Analysis", Bachelor in Statistical Sciences, Faculty of Statistical Sciences, University of Bologna, Italy. Supervisor: Prof. M. Pillati. a.y. 2009/10
10. "Statistics", Bachelor in Economics and Law, Faculty of Economics, University of Bologna, Italy. Supervisor: Prof. A. Roverato. a.y.s 2009/10, 2008/09
11. "Statistics lm", (Second cycle) Bachelor in Economics, Faculty of Economics, University of Bologna, Italy. Supervisor: Prof. A. Roverato. a.y. 2009/10
12. "Time series analysis and multidimensional", Bachelor in Statistical Sciences, Faculty of Statistical Sciences, University of Bologna, Italy. Supervisor: Prof. M. Pillati. a.y.s 2008/09, 2007/08, 2006/07
13. "Statistical Models (Advanced course)", Bachelor in Statistical Sciences, Faculty of Statistical Sciences, University of Bologna, Italy. Supervisor: Dr. G. Galimberti. a.y. 2008/09
14. "Multivariate Analysis", (Second cycle) Bachelor in Statistical Sciences, Faculty of Statistical Sciences, University of Bologna, Italy. Supervisor: Prof. A. Montanari. a.y.s 2007/08, 2006/07
15. "Institutions of statistics", Bachelor in Economics and Law (CLED), Faculty of Economics, University of Bologna, Italy. Supervisor: Prof. A. Roverato. a.y. 2007/08
16. "Statistics for economics applications", Bachelor in Economics and Law (CLASED), Faculty of Economics, University of Bologna, Italy. Supervisor: Prof. A. Roverato. a.y. 2007/08

## Invited seminars and short courses

June 2022 Seminar on "Conditional dependence modelling and copula-based clustering with application to district heating data", Dept. of Statistical Science, University College London (UCL).

May 2019 Seminar on "Joint and conditional dependence modelling of district heating demand and weather conditions: a copula-based approach", Dept of Economics, Business, Mathematics and Statistics "Bruno de Finetti", University of Trieste, Italy.

Jan. 2015 Seminar "A copula-based approach for discovering inter-cluster dependence relationships", EURAC - Center for Biomedicine, Bozen-Bolzano, Italy.

Aug. 2011 Short course (9 hours) "Exploring copulas for the imputation of missing nonlinearily dependent data", Dept. of Statistical Sciences "P. Fortunati", University of Bologna, Italy.

Feb. 2010 Faculty Seminar "Modelli per dati panel con applicazioni al campo dell'arte", Faculty of Economics, Rimini Campus Branch, University of Bologna, Italy.

Oct. 2005 Department Seminar "Un nuovo approccio alla caratterizzazione dei processi stocastici lineari e non lineari" Dept. of Statistical Sciences "P. Fortunati", University of Bologna, Italy.

## Affiliations

Italian Statistical Society (SIS), International Statistical Institute (ISI) and International Association for Statistical Computing (IASC), Working Group in Computational and Methodological Statistics (CMStatistics).

## University services (selection)

10.2025-Pres Director of the Master in Data Analytics for Economics and Management.

2026-Pres President of the Admission Board to the Master in Data Analytics for Economics and Management.

2026-Pres Member of the Selection Committee of teaching contract lecturers, lecturing assistants, teaching assistants - SSD Mathematics and Statistics.

2025-2026 Member of the Admission Board to the Master in Data Analytics for Economics and Management.

2024-2025 Substitute Member of the Selection Committee of teaching contract lecturers, lecturing assistants, teaching assistants - SSD Mathematics and Statistics.

2023 – 2025 Executive Committee (restricted collegio) Member of the PhD in Economics and Finance (jointly with the University of Trento, School of Social Sciences).

2021 – Pres Scientific Committee Member of the PhD in Economics and Finance, Faculty of Economics and Management, Free University of Bozen-Bolzano.

2020 – 2023 Member of the Quality Committee of the Free University of Bozen-Bolzano.

2020 Member of the Joint Studies Committee of the Faculty of Economics and Management for the Annual report 2020.

2020 – Pres Member of the Faculty Council: Faculty of Economics and Management.

2020-2023 Second member of the Degree Programme in Economics and Social Sciences (PPE):

- Active participation in the course council and in the reform of the study programme
- President of the Admission Board to the Degree Programme (from 2021)
- Member of the Steering committee (Comitato di indirizzo) (from 2021)
- Committee member for graduation sessions.

2018 – Pres Academic responsible for the exchange program with the Louvain School of Management, Catholic University of Louvain (UCL).

2018 – 2021 Organizer (with A. Fedele) of research seminar series for the cluster “Quantitative Methods and Economic Modeling”.

2017 – Pres Member of several Selection Committee of research assistants (Post-doc) in Statistics and related fields.

2017 – 2023 Erasmus grade conversion system, Developer and Responsible person of the sending institution.

2016 – Pres Coordinator (with Dr. A. Fedele) of Bozen-Bolzano Economics & Management Paper Series (BEMPS).

2016 – Pres Participation in Infoday and Orientation Day for freshers.

2015 – Pres Participation in Open Days.

2013 – 2024 Member of the Selection Committee of research fellows, teaching contract lecturers, lecturing assistants, teaching assistants - SSD Mathematics and Statistics.

2012-Pres Supervisor (I or II) or co-supervisor of several Bachelor and Master degree theses.

2012-Pres Member of several committees for final exam (i.e. degree thesis examination).

### Third mission (selection)

Meeting with stakeholders of local institutions on the new study plan of the Master's Programme in Data Analytics for Economics and Management, 5.12.2025.

Science Live, event with stand "Un viaggio nelle Dolomiti attraverso la statistica", 14.11.2025.

Festival Le mille e una scienza, event with stand "Che numeri - a tu per tu con la statistica", 11-13.11.2022.

Meeting with stakeholders of local institutions for the Bachelor in Economics and Social Sciences (L-33), Faculty of Economics and Management, Free University of Bozen-Bolzano, Sept. 23rd, 2022 and Oct. 29th, 2021.

Initiatives of school guidance, lecture on "Lies, damned lies, and statistics: come leggere e interpretare correttamente i dati statistici". February 2019: Visit of a class of the I.T.E. C. Battisti in Bozen-Bolzano.

Junior Uni, "Probabilando", (with A. Gianfreda), for a class of a primary school in Merano, Faculty of Economics and Management, Free University of Bozen-Bolzano, May 25th, 2018.

Interview for the Corriere della Sera "In Alto Adige culle piene grazie a servizi e assegni", March 7th, 2017, p.8.

Collaboration with the Laives municipality for a statistical survey, 2016-2017. Several press articles (Corriere dell'Alto Adige, CNA-SVH, Kulturunibz) and a TGR interview.

Interview for the Corriere dell'Alto Adige, "Migrazioni interne: Trento record, Bolzano rallenta", May 3rd, 2016, p.7.

Long Night of the Research (LUNA) 2014, project "Quanto sfumato (fuzzy) sei?", September 2014.

Interview for the Corriere dell'Alto Adige, "I nuovi sudtirolesi: single e stranieri", May 19th, 2013, p.1,7.

### Languages

Italian and Capaccese First languages

English C1 European level (CEFR) - IELTS test

German B2 European level (CEFR) - Certificate of the Language center of the Free University of Bozen-Bolzano (computer-based language exam)