![europass logo] Curriculum vitae

PERSONAL INFORMATION   Sabrina Giordano

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Date of birth 21 August 1976 | Nationality Italian

WORK EXPERIENCE

April 2015 –

Associate Professor in Statistics
Department	Economics, Statistics and Finance "Giovanni Anania"
University	University of Calabria, Italy
Address	Via Pietro Bucci, CUBO 0C, 87036 Rende CS, Italy
Activity	Teaching and research

January 2005 – Mars 2015

Assistant Professor in Statistics
Department	Economics, Statistics and Finance "Giovanni Anania"
University	University of Calabria, Italy
Address	Via Pietro Bucci, CUBO 0C, 87036 Rende CS, Italy
Activity	Teaching and research

EDUCATION AND TRAINING

2000–2003

Ph.D. in Methodological Statistics
University of Milano-Bicocca, Italy

1994–1999

Degree in Statistics and Actuarial Sciences
University of Calabria, Italy

PERSONAL SKILLS

Mother tongue   Italian

Other languages

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	B2	B2	C1
French	C1	C1	B2	B2	B2

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user
Common European Framework of Reference for Languages

| Organisational / Managerial Skills | – Director of a Post-Graduate Master in Artificial Intelligence & Data Science, funded by the Ministry of University and Research under the Territorial Pacts for Higher Education for Business (since 2021) |

Organisational / Managerial Skills

– Director of a Post-Graduate Master in Artificial Intelligence & Data Science, funded by the Ministry of University and Research under the Territorial Pacts for Higher Education for Business (since 2021)
– Coordinator of the Training school titled Advances in Data Science and AI for Finance: Bridging Academia and Industry, June 2024, University of Calabria
– Member of the international COST Fin-AI action research group (https://fin-ai.eu/, 2022 – 2024), CA19130-Fintech and Artificial intelligence in Finance - Towards a transparent financial industry
– Member of Board of the PhD School of Economics and Business Administration, University of Calabria, since 2014
– Scientific Committee member of national and international conferences, including International Conference of the ERCIM WG on Computational and Methodological Statistics (London 2021, London 2022, Berlin 2023), Conference of the Statistical Society (Ancona, 2023), Women in Fintech and AI (Rethymno, Greece, 2024), Meeting of the CLAssification and Data Analysis Group (Naples, 2025)
– Invited Professor of the 31st Course on Statistical Methodology for Basic and Applied Biological Research, Salerno, September 18-21, 2023, named by the scientific committee of the Italian Society of Biometrics.

Digital competences

SELF-ASSESSMENT				
Information Processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Digital competences - Self-assessment grid

Research Interests

Models for categorical and ordinal data, mixture models, models for longitudinal data and time series, latent variables, hidden Markov models, graphical models, modelling dependence through copula functions, new distribution families for categorical and quantitative variables, models for risk perceptions and financial vulnerability, network analysis, fairness.

Recent granted research projects	– Director of the Master's Program in Artificial Intelligence & Data Science, funded by the Ministry of University and Research within the framework of the 'Territorial Agreements for Advanced Training for Businesses.' Funding for the training of innovative professional profiles (amounting to 3,067,000 euros).
	– 2023 – 2025 Principal Investigator of Local Unit Università della Calabria of Programma di Ricerca Scientifica di Rilevante Interesse Nazionale PRIN (2022) The SMILE project: Statistical Modelling and Inference to Live the Environment, Principal Investigator: Prof. A. Maruotti Libera Università degli Studi "Maria SS.Assunta" (amounting to 250,000 euros)
	– 2023 – 2026 Principal Research Responsible of Pilot 4.8 of project ANTHEM: AdvaNced Technologies for Human-centEred Medicine: Title: AI Based Systems Biology Approaches in Cancer Multi-Omics Data Analysis, with working packages: WP1 Data Analysis and Design for Prognosis Prediction; WP2 Platform Development and Precision Medicine Analysis. Principal Investigator: Prof. M. Maggiolini (Università della Calabria)
	– Principal Investigator of the Project "Analisi dei modelli statistici in uso per l'identificazione di una metrica di quality of service sui servizi di customer caring a livello internazionale", funded by Abramo Customer Care SPA, Italy (11/2018-11/2019)
	– Member (Expert in Statistics) of the Project "Antartic National Research Program 2020 (PNRA)": AntaGPS – Antarctica as a global pollution sensor: aquatic and terrestrial organisms as bio–indicators and meta–analysis of pollutant trends (Principal Investigator: Dr. D. Pellegrino, University of Calabria)
	– Member (Expert in Statistics) of the "Project PON HORIZON 2020": ALCMEONE – Gestione clinica integrata del paziente cefalalgico: innovativi modelli organizzativi e avanzata piattaforma tecnologica di servizi a supporto dell'integrazione degli ambienti, processi e percorsi di assistenza e cura (Principal Investigator: Prof. D. Conforti, University of Calabria)
	– Member of the "Project PRIN 2012 (B-Consolidator)": Household wealth and youth unemployment: new survey methods to meet current challenges (Principal Investigator: Prof. MG Ranalli, University of Perugia)
	– Member (Expert in Statistics) of the "Project PON 2007–2013": Landslides early warning: sistemi integrati per il monitoraggio, l'early warning e la mitigazione del rischio idrologico lungo le grandi vie di comunicazione (Principal Investigator: Prof. L. Versace, University of Calabria)
	– Member of the "Project STAR 2012 – 2014 (Sostegno Territoriale alle Attività di Ricerca)": Statistical model for human perception and evaluation (Principal Investigator: Prof. M. Iannario, University of Napoli Federico II)
	– Member of the "Project INAIL 2011 – 2014 (Istituto Nazionale Assicurazione Infortuni sul Lavoro)": La valutazione del rischio in un'ottica di genere (Principal Investigator: Prof. M. Stranges, University of Calabria)
Teaching competences	More than 20 years experiences in teaching at bachelor, master and PhD levels
Current Courses	- Statistical Methods for Data Science – Master Degree in Artificial Intelligence and Data Science (in English)
	- Statistical Models for Categorical Data – Master Degree in Data Science for Business Strategies
	- Statistics - Bachelor Degree in Statistics for Data Science
Computer skills	– competent with R, Python, Matlab, Fortran
Visisting Positions	International:
	- Visiting Professor of Statistics, Institute of Statistics, RWTH Aachen University, Germany (February 2017, May – June 2018)
	- Visiting Scholar of Statistics, Department of Statistics, University of Florida, USA (January 2006 – May 2006)
	- Staff mobility for teaching Erasmus +, University of Plymouth, UK (September 2017)
	- Visiting Professor of Statistics, Bayes Business School, City - University of London (UK), (July 2023)

Selected Invited Talks   In Seminars

- Data Science Ethics: Cautionary Tales, University of Pavia, 30 Mars 2023
- Rating scale mixture model to account for the tendency to middle and extreme categories, University of Bologna, Italy, July 1, 2021
- A family of mixture models for multivariate rating scale data, University of Padova, Italy, May 17, 2019
- A multivariate mixture model for responses to rating questions allowing for uncertainty, University of Plymouth, UK, Royal Statistical Society South West Local Group Meeting, September 27, 2017
- Modelling ordinal responses: a hierarchical marginal model with latent uncertainty components, RWTH Aachen University, Germany, February 8, 2017
- A measure of financial fragility, University of Milano-Bicocca, Italy, July 13, 2012

Selected Invited Talks   In Conferences

- Bias-Conscious Splitting: A Novel Classification Tree for Fair Decision-Making. SDS 2025 – Statistical Methods for Data Analysis and Decision Sciences, Milan, 2-3 April 2025
- A new reading of the parameters in Markov switching stereotype models. IMS International Conference on Statistics and Data Science (ICSDS), December 18-21, 2023, Lisbon, Portugal
- Challenging the assumption of consistent responding behavior over time through a Markov switching model. 16th International Conference of the ERCIM WG on Computational and Methodological Statistics, Berlin, 16-18 December 2023
- A Two-Component Markov Switching Regression Model. Scientific Meeting Classification and Data Analysis Group, Salerno, 11-13 Sptember 2023
- A longitudinal study of financial capability accounting for the attitude for response styles, Diversity challenges and stakeholders' engagement in Finance and FinAI, Babeș-Bolyai University of Cluj-Napoca, 1-2 febbraio 2023, Cluj-Napoca (Romania)
- Unconstrained scores in stereotype logit models: what do they reveal? Challenges for Categorical Data Analysis, Perugia, 12-13 maggio 2022
- A mixture model for discriminating responses affected by response styles and content-driven prefer-ences. International Meeting of Psychometric Society. Bologna, July 11-15, 2022
- A Responding Attitude Component in Hidden Markov Models, International Workshop on Statistical Modelling, Trieste, 18-22 July 2022
- Markov switching stereotype logit models with two latent indicators for longitudinal ordered data, 15th International Conference of the ERCIM WG on Computational and Methodological Statistics, London, 17-19 December, 2022
- Financial capability: a longitudinal perspective through hidden Markov models, "15th International Conference on Computational and Financial Econometrics", Hybrid Conference, King's College London, UK, December 18–20, 2021
- Accounting for response behavior in longitudinal rating data, "13-th Scientific Meeting Classification and Data Analysis Group", Virtual Conference, University of Firenze, Italy, September 9-11, 2021
- A family of models for multivariate rating scale data accounting for response styles, "11th International Conference of the ERCIM Working Group on Computational and Methodological Statistics", University of Pisa, Italy, December 14-16, 2018
- A flexible distribution to handle response styles when modelling rating scale data, "Advances in Statistical Modelling of Ordinal Data", University of Napoli Federico II, Italy, October 24–26, 2018
- A bivariate latent Markov model for repeated ordinal responses, "Challenges for Categorical Data Analysis", RWTH Aachen University, Germany, October 22–23, 2018
- Modelling uncertainty in bivariate models for ordinal responses, "48th Scientific Meeting of the Italian Statistical Society", University of Salerno, Italy, June 8-10, 2016
- Accounting for two types of uncertainty in a multidimensional CUB model, "Statistical Models for Complex data", University of Napoli Federico II, Italy, June 26, 2015
- A multivariate CUB model, "7th International Conference of the ERCIM Working Group on Computational and Methodological Statistics", University of Pisa, Italy, December 6–8, 2014
- The Sarmanov CUB model, Workshop SUNOVA & SHAPE (Statistics with Unobservable Variables and Statistical Models for Human Perception and Evaluation), University of Brescia, Italy, October 21, 2014
- Nested continuation logit models for ordinal variables, "Advances in Statistical Modelling of Ordinal Data", University of Napoli Federico II, Italy, November 25-26, 2013

Editorial Activities	Associate Editor of

- Biometrical Journal (from 01/2022)
- Journal of Statistical Methods & Applications (Methods) (from 01/2022)
- Statistica (from 01/2019)
- Member of Editorial Committee of Statistica e Applicazioni (from 01/2017)

SELECTED PUBLICATIONS

PR International Journal

- Będowska-Sójka, B., Wójcik, P., Giordano, S. (2025). Has bitcoin been dethroned too quickly? The cryptocurrency return networks. Network Science, 13, e1.
- Colombi, R., Giordano, S. (2024). Markov switching stereotype logit models for longitudinal ordinal data affected by unobserved heterogeneity in responding behavior. AStA Advances in Statistical Analysis, 1-31.
- Colombi, R., Giordano, S., Kateri, M. (2024). Hidden markov models for longitudinal rating data with dynamic response styles. Statistical Methods & Applications, 33(1), 1-36.
- Giordano S (2023) Data Science Ethics: Concepts, Techniques and Cautionary Tales, Book review, Journal of the American Statistical Association vol. 118(541), p. 774-776
- Agresti A, Giordano S, Gottard A (2022). A review of score-test-based inference for categorical data. Journal of Quantitative Economics, 20(Suppl 1), 31-48
- Colombi R, Giordano S, Tutz G (2021). A rating scale mixture model to account for the tendency to middle and extreme categories. Journal of Educational and Behavioral Statistics, vol. 46(6), p. 682–716
- Colombi R, Giordano S (2020). Modelling different behaviors in disclosing risk perception. Biometrical Journal vol. 62(5), p. 1315-1336
- Colombi R, Giordano S (2019). Likelihood based tests for a class of misspecified finite mixture models for ordinal categorical data. Test, vol. 28, p. 1175–1202
- Colombi R, Giordano S, Gottard A, Iannario M (2019). Hierarchical marginal models with latent uncertainty. Scandinavian Journal of Statistics, vol. 46, p. 595–620
- Domma F, Condino F, Giordano S (2018). A new formulation of the Dagum distribution in terms of income inequality and poverty measures. Physica A – Statistical Mechanics and Its Applications, vol. 511, p. 104–126
- Colombi R, Giordano S (2016). A class of mixture models for multidimensional ordinal data. Statistical Modelling, vol. 16(4), p. 322–340
- Colombi R, Giordano S (2015). Multiple hidden Markov models for categorical time series. Journal of Multivariate Analysis, vol. 140, p. 19–30
- Colombi R, Giordano S, Cazzaro M (2014). hmmm: An R Package for hierarchical multinomial marginal models. Journal of Statistical Software, vol. 59(11), p. 1–25
- Colombi R, Giordano S (2013). Monotone dependence in graphical models for multivariate Markov chains. Metrika, 76, p. 873–885
- Domma F, Giordano S (2013). A copula–based approach to account for dependence in stress–strength models. Statistical Papers, vol. 54(3), p. 807–826
- Domma F, Giordano S (2012). A stress–strength model with dependent variables to measure household financial fragility. Statistical Methods & Applications, vol. 21, p. 375–389
- Passarino, G., Montesanto, A., Dato, S., Giordano, S., Domma, F., Mari, V., De Benedictis, G. (2006). Sex and age specificity of susceptibility genes modulating survival at old age. Human heredity, 62(4), 213-220.