Curriculum Vitae - Caterina Conigliani

Caterina Conigliani is Associate Professor of Statistics at the Department of Economics of Roma Tre University (Rome, Italy). She graduated in Statistics at "La Sapienza" University of Rome and holds a Ph.D. in Statistics from the same university. She is a Fellow of the Società Italiana di Statistica, and a member of the Centro di Studi su Mercati e Relazioni Industriali (CeSMeR) at Roma Tre and of the inter-university Research Centre on Sustainability Environmental Economics and Dynamics Studies (SEEDS). She's member of the editorial board of the journal *Insights into Regional Development* (Entrepreneurship and Sustainability Center, Vilnius, Lithuania). Her current main research and publications are in the fields of model uncertainty, with particular attention devoted to Bayesian model comparison, Bayesian methods for health economics, spatial econometrics with applications to environmental economics, gravity models.

Past positions

Researcher in the Faculty of Economics, University of Roma Tre, Italy (October 2001- December 2010).

Research assistant (assegno di ricerca in "Metodi probabilistici e applicazioni alla statistica matematica", s.s.d. A02B) in the Faculty of Statistics, University of Rome "La Sapienza", Italy (March 2001-September 2001).

Postdoctoral fellow in the Faculty of Economics, University of Roma Tre, Italy (March 1999 - March 2000).

Visiting research scholar at the Department of Mathematics, University of Nottingham, UK, with a scholarship "Biagio Stefanelli" conferred from the President of the Cassa di Sovvenzioni e Risparmio fra il personale della Banca d'Italia (academic year 1997-1998).

Visiting Ph.D student at the Department of Mathematics, University of Nottingham, under the supervision of Prof. A. O'Hagan.

Education and awards

First degree in Statistics and Economics, 110/110 cum laude, University of Rome "La Sapienza", Italy (22-06-1994).

Ph.D. in methodological statistics: "Fractional Bayes factors for model selection", University of Rome "La Sapienza", Italy (08-07-1998).

Pompilj Prize for career development in Probability and Mathematical Statistics since graduation awarded by the Department of Statistics, Probability and Applied Statistics, University of Rome "La Sapienza" (1998).

Best Ph.D. thesis in Statistics awarded by the Italian Statistical Society (1999).

Links to scientific profile

ORCID ID: https://orcid.org/0000-0003-1026-1928

GoogleScholar: https://scholar.google.it/citations?user=-Qg1jJwAAAAJ&hl=it

Scopus: https://www.scopus.com/authid/detail.uri?authorId=6507077911

Ideas: https://ideas.repec.org/f/pco416.html

Teaching at the Department of Economics, University of Roma Tre:

- Statistica (LT): from a.y. 2002/2003 to present
- Metodi bayesiani per l'analisi dei dati economici (LM): a.y. 2010/2011, 2011/2012
- Statistica Applicata alle Decisioni Aziendali (LT): a.y. 2012/2013, 2013/2014, 2014/2015
- Metodi Statistici applicati all'Economia (LM): a.y. 2015/2016, 2016/2017
- Statistical methods in economics (LM): from a.y. 2017/2018 to present
- CLE Lab (LT): a.y. 2023/2024

Faculty board member for Ph.D. programs

Ph.D. program in *Metodi statistici per l'economia e l'impresa*, University of Roma Tre (2002-2012);
Ph.D. program in *Economia e metodi quantitativi*, University of Roma Tre (2013);
Ph.D. program in *Economia,* University of Roma Tre (2014-2021).

Ph.D. tutoring

- Giovanna D'Agostino (University of Roma Tre), "Large Scale Land Acquisitions";
- Daniele Pianeselli (University of Roma Tre), "Three Essays on Financing Innovation during the Crisis";
- Martina Iorio (University of Roma Tre), "Three essays on the development of Brasilian Amazon";
- Nicola Caravaggio (University of Roma Tre), "Economic growth and the Forest Development Path. A re-assessment of the Environmental Kuznets curve for Deforestation";
- Federica Cappelli (University of Roma Tre), "Three essays on socioeconomic vulnerability to climate change".

Ph.D. final examiner

- Francesca Mazzarella (University of Roma Tre), "Electricity Markets and Environmental Policies: Evi-dence on the Electricity Price Pass-through in Italy".

- Daniela Giannini (University of Roma "La Sapienza"), "Spatial analysis of photoreceptor mosaic from Adaptive Optics images of the human retina".
- Giorgia Rocco (University of Roma "La Sapienza"), "Multilevel mixed-type data analysis for validating partitions of scrapie isolates".
- Giacomo Morelli (University of Roma "La Sapienza"), "Essays on Asymmetric Risks in Finance and Insurance".
- Francesco Dotto (University of Roma "La Sapienza"), "Advances in Robust Clustering Methods with Applications".
- Alberto Di Iorio (University of Roma "La Sapienza"), "Analytic Inference in Finite Population Framework Via Resampling".
- Elisa Fusco (University of Roma "La Sapienza"), "New developments in frontier models for objective assessments".

Main publications

Sensitivity of the fractional Bayes factor to prior distributions (C. Conigliani, A. O'Hagan), *Canadian Journal of Statistics,* 28, 2000, pp. 343-352.

Bayesian assessment of goodness of fit against nonparametric alternatives (C. Conigliani, J.I. Castro, A. O'Hagan), *Canadian Journal of Statistics,* 28, 2000, pp. 327-342.

Semi-parametric modelling for costs of health care technologies (C. Conigliani, A. Tancredi), *Statistics in Medicine*, 24, 2005, pp. 3171-3184.

A Robust Bayesian Approach for Unit Root Testing (C. Conigliani, F. Spezzaferri), *Econometric Theory,* 23, 2007, pp. 440-463.

A Bayesian model averaging approach for cost-effectiveness analyses (C. Conigliani, A. Tancredi), *Health Economics*, 18, 2009, pp. 807-821.

A Bayesian model averaging approach with non-informative priors for cost-effectiveness analyses (C. Conigliani), *Statistics in Medicine*, 29, 2010, pp. 1696–1709.

Prediction of patient reported outcome measures via multivariate ordered probit models (Conigliani C, Manca A, Tancredi A). *Journal of the Royal Statistical Society, Series A: Statistics in Society*, vol. 178, 2015, p. 567-591, ISSN: 0964-1998, DOI: 10.1111/rssa.12072

Large scale land investments and forests in Africa (Conigliani C, Cuffaro N, D'Agostino N.). *Land Use Policy*, n. 75, 2018, pp 651-660, ISSN: 0264-8377, doi.org/10.1016/j.landusepol.2018.02.005

Do spatial interactions fuel the climate-conflict vicious cycle? The case of the African continent (Cappelli F, Conigliani C, Costantini V, Lelo K, Markandya A, Paglialunga E, Sforna G.). *Journal of Spatial Econometrics*, vol. 1, 2020, p. 1-52, DOI: 10.1007/s43071-020-00007-8

Bayesian networks for the analysis of inpatient admissions (Conigliani C., Petitti T., Vitale V.). *Italian Journal of Applied Statistics – Statistica Applicata*, Special Issue on *Decision support systems and Healthcare services*, vol. 32, 2020, p. 141-160.

Climate-related natural disasters and forced migration: a spatial regression analysis (Conigliani C., Costantini V., Finardi G.). *Spatial Economic Analysis,* vol. 17, 416-439, 2022, doi.org/10.1080/17421772.2021.1995620.

Climate change and armed conflicts in Africa: temporal persistence, non-linear climate impact and geographical spillovers (Cappelli F., Conigliani C., Consoli D., Costantini V., Paglialunga E.), *Economia Politica,* vol. 40, 517-560, 2023, doi.org/10.1007/s40888-022-00271-x

Conflicts and natural disasters as drivers of forced migrations in a gravity-type approach (Buzzanca, L., Conigliani, C., Costantini, V.). *Entrepreneurship and sustainability issues*, 10, 2023, doi.org/10.9770/jesi.2023.10.3(17).

Water, energy and human development in the Brazilian Amazon: a municipal human development index adjusted for accesses (Conigliani C., Iorio M., Monni, S.). *Entrepreneurship and sustainability issues*, 10, 318-328, 2023, doi.org/10.9770/jesi.2023.10.3(21).

Access to water and electricity and sustainable development: evidence from the Amazonian State of Parà (Conigliani C., Iorio M., Monni, S.). *Entrepreneurship and sustainability issues*, 12, 179-194, 2024, doi.org/10.9770/jesi.2024.12.1(13).

Joint modelling of dyadic and monadic count outcomes: an application to modelling forced migration flows (Conigliani, C.). *Statistical Modelling*, 2024, to appear.

Manuscripts submitted:

Forecasting the climate-conflict nexus in Africa under SSPs scenarios (Conigliani, C., Costantini, V., Paglialunga, E., Tancredi, A.). Submitted.

From insights to strategy: mapping Rome's cultural heritage for optimal resource management and promotion (Masili, G., Conigliani, C., Addis, M.). Submitted.

Proximity effects of essential services for urban regeneration: The case of Rome (Conigliani, C., Addis, M., Spinesi, L.). Submitted.

Online survey on alcohol consumption in patients affected by chronic autoimmune liver diseases during covid-19 pandemic (Delle Monache, M., Delle Monache, M., Carli, M., Vestri, A.R., Conigliani, C., Pascucci, F., Sirufo, M.M., Ginaldi, L., De Martinis, M.). Submitted.

Manuscripts in preparation:

Bayesian spatial modeling of the climate-conflict nexus in Africa (Conigliani, C., Costantini, V., Paglialunga, E., Schmidt, A.M., Tancredi, A.). Manuscript.

The relationship between migration and conflict: a joint modelling approach for dealing with endogeneity and simultaneity bias (Conigliani, C., Dotto, F). Manuscript.

Gravity models of timber trade (Caravaggio, N., Conigliani, C.). Manuscript.

Other publications:

Robust statistics: from classical to Bayesian analysis (Conigliani C, Dall'Aglio M, Perone Pacifico M, Salinetti G.). METRON, vol. LII, 1994, p. 89-109, ISSN: 0026-1424

Bayesian Analysis of Autoregressive Time Series with Change Points (Barbieri M M, Conigliani C.). *Journal of the Italian Statistical Society*, 1998, vol. 3, p. 243-255, ISSN: 1121-9130

Il metodo bayesiano per le analisi decisionali in sanità (Conigliani C, Tancredi A, Manca A.). Pharmacoeconomics, Italian Research Articles, 2010, vol. 12, p. 1-4, ISSN: 1590-9158

A note on Bayesian hypothesis testing for the scalar skew-normal distribution (Carota C, Conigliani C.). In: Proceedings of the 45th Scientific Meeting of the Italian Statistical Society. Padova, 2010, ISBN: 978-88-6129-566-7

Statistical methods for health care economic evaluation (Conigliani C, Manca A, Tancredi A.). In: Statistical Methods in Healthcare, 2012. Wiley, ISBN: 978-0-470-67015-6

Il problema dei fuori corso e la riforma 3+2. Una indagine sui corsi di laurea di economia (Potestio M, Conigliani C.). *Rivista di Politica Economica*, 2013, p. 61-80, ISSN: 0035-6468

Predictive model assessment for mapping between measures of health outcomes (Conigliani C, Manca A, Tancredi A.). In: 8th International Conference of the ERCIM (European Research Consortium for Informatics and Mathematics) working group on Computational and Methodological Statistics (CMStatistics 2015). London, UK, 2015. ISBN 978-9963-2227-0-4

Forme contrattuali e flessibilità nelle imprese manifatturiere italiane: alcuni confronti regionali (Potestio M., Conigliani C. Vitale V.). *Economia & Lavoro*, 2017, vol 2, pp97-122, ISSN: 0012-978X, DOI: 10.7384/89266

Climate Change and Armed Conflicts African Observatory (CACAO): a georeferenced map of Africa (Cappelli F, Conigliani C, Costantini V, Lelo K, Markandya A, Paglialunga E, Sforna G.). BC3 WORKING PAPER SERIES 2018-02, 2018.

Participation in research projects

PRIN 2001: Costruzione e scelta di modelli, coordinatore nazionale Prof. Racugno;

PRIN 2002: Stime per piccole aree orientate alla valutazione delle politiche di sviluppo e coesione, coordinatore nazionale Prof. Zuliani;

PRIN 2003: Modelli statistici e teoria dei test multipli in biostatistica, coordinatore nazionale Prof. Racugno.

PRIN 2006: Classi flessibili di distribuzioni ottenute mediante perturbazione della simmetria: aspetti probabilistici, statistici e applicativi, coordinatore nazionale Prof. Azzalini.

PRIN 2008: Nuovi sviluppi nella teoria e nella pratica del campionamento statistico, coordinatore nazionale Prof.ssa Cocchi.

PRIN 2017: Innovation for global challenges in a connected world: the role of local resources and socio-economic conditions, coordinatore nazionale Prof. Antonelli.

PRIN 2022 project 202252P92X: Assessing Public Policy effectiveness in minimising Local Impacts with Climate-related AdapTation Expenditures (APPLICATE), Coordinatore nazionale Prof. G. Marin.

PRIN 2022 PNRR: REgional Assessment of Distributive impacts of a Just and Sustainable Transition (RE-ADJUST), Responsabile Prof.ssa V. Costantini, P.I. Prof.ssa E. Paglialunga.

CHANGES - Cultural Heritage Active Innovation for Sustainable Society (2023-2026), Project PE 0000020 CHANGES - CUP F83C22001650006, National Recovery and Resilience Plan (NRRP) Mission 4 Component 2 Investment 1.3, funded from the European Union - NextGenerationEU. Spoke 8.

SCENA (2023-2025)*,* research project funded by PR FESR LAZIO 2021-2027 Avviso pubblico "Riposizionamento competitivo RSI – Ambito 4 "Industrie creative e digitali" e "Patrimonio Culturale e Tecnologie della Cultura", in collaboration with DM Cultura, for the development of management platforms for cultural institutions.

Referee

Journal of Applied Econometrics, Canadian Journal of Statistics, Econometric Theory, Scandinavian Journal of Statistics, Statistics in Medicine, Computational Statistics and Data Analysis, Medical Decision Making, Journal of Statistical Computation and Simulation.