## Alessio Pollice Curriculum Vitae [03/09/2021]

### RESEARCH INTERESTS

His research activities are mainly devoted to spatial and spatio-temporal data analyses of environmental processes, with particular focus on Bayesian hierarchical modeling of air quality data, environmental-epidemiological applications and ecological processes (including fishery data modeling, biodiversity and ecosystem status assessments).

#### H-INDEX AND CITATIONS

Google scholar:

- Total citations: 1266 (all), 547 (from 2016)

- h-index: 15 (all), 11 (from 2016)

- i10-index: 21 (all), 16 (from 2016)

Scopus:

- h-index: 12

## PRESENT POSITION

Full professor of Statistics at the University of Bari, since October 2019.

#### **EDUCATION**

Ph.D. in Statistics at University of Bari.

Degree in Statistics and Economics, University of Bari.

#### PAST POSITION

Full Professorship National Scientific Qualification in Statistics, 2016.

1998 – 2019, Associate professor of Statistics at the University of Bari

1993 – 1998, University Researcher in Statistics, University of Bari.

## RECENT INVITED TALKS

- 2019, 62nd ISI World Statistics Congress, Kuala Lumpur, Bayesian hierarchical modeling of multivariate climate data (with G. Mastrantonio, G. Jona Lasinio, G. Capotorti, L. Teodonio, C. Blasi).
- 2019, 62nd ISI World Statistics Congress, Kuala Lumpur, Bayesian measurement error correction in structured additive distributional regression (with G. Jona Lasinio, T. Kneib) (2019).
- 2019, SIS 2019 Smart Statistics for Smart Applications, Milano, Multivariate change-point analysis for climate time series (with G. Mastrantonio, G. Jona Lasinio, G. Capotorti, L. Teodonio, C Blasi).
- 2019, TIES-GRASPA 2019, Pescara, Multivariate change-point analysis for climate time series (with G. Mastrantonio, G. Jona Lasinio, G. Capotorti, L. Teodonio, C. Blasi).
- 2018, 49th Meeting of the Italian Statistical Society, Palermo, A Hierarchical Multivariate Spatio-Temporal Model for Clustered Climate data with Annual Cycles (with G. Jona Lasinio, G. Mastrantonio, G. Capotorti, L. Teodonio, C. Blasi).
- 2017, TIES-GRASPA 2017 on climate and environment, Bergamo, Modelling fish fauna assemblages to detect factors affecting differences between coral and non-coral habitats (with C. Calculli, G. D'Onghia, L. Sion).
- 2017, TIES-GRASPA 2017 on climate and environment, Bergamo, Assessing the role of the spatial scale in the analysis of lagoon biodiversity. A case-study on the microbenthic fauna of the Po river delta (with G. Jona Lasinio, E. Marcon, E.A. Fano).
- 2016, 48e Journées de Statistique de la Société Française de Statistique. Montpellier, Assessment of site-specific wind predictions by a hidden Markov model for multivariate circular-linear data (with G. Mastrantonio, F. Fedele).
- 2014, XXIV Conference of the Italian Ecological Society, Ferrara, Biodiversity partitioning for transitional water ecosystems (with G. Jona Lasinio, A. Basset, S. Arima, I. Rosati, A. Fano).
- 2013, XXIII Conference of Italian Ecological Society, Ancona, A model-based approach to lagoon ecosystem classification (with G. Jona Lasinio, S. Arima, A. Basset, I. Rosati).
- 2013, Advances in latent variables: methods, models and applications Conference of the Italian Statistical Society, Brescia, Bayesian analysis of the multivariate dependence of three transitional water ecosystem classifications (with S. Arima, G. Jona Lasinio, A. Basset, I. Rosati).
- 2012, Energy, Air Quality and Sustainability: Models and Evidence, Bergamo, Air quality in Taranto: statistical and modelling issues arising with the analysis of monitoring network data.
- 2012, XXII Conference of the Italian Ecological Society, Alessandria, Analysis of environmental/anthropogenic effects on the spatio-temporal distribution of population parameters in deep-sea shrimps from the North-Western Ionian Sea by Generalized Additive Models (with S. Arcuti, C. Calculli, N. Ribecco, A. Tursi, G. D'Onghia, M.T. Minerva, P. Maiorano).
- 2012, PM 2012 5th National Conference on Particulate Matter, Perugia, Statistical models and analyses of air quality monitoring data (with G. Jona Lasinio).

2010, TIES 2010 – the 21st Annual Conference of The International Environmetrics Society, Isla Margarita (VE), Identifying sources of PM10 pollution in the Taranto area (with G. Jona Lasinio).

#### SERVICES IN SCIENTIFIC SOCIETIES

- 2021 ... Elected member of the Board of The International Environmetrics Society, section of the International Statistical Institute.
- 2016 2020 Elected member of the Executive Council of the Italian Statistical Society.
- 2015 2019 Elected president of GRASPA-SIS, research group for statistical applications to environmental problems, permanent working group of the Italian Statistical Society.
- 2013 2015 Elected vice-president of GRASPA-SIS.

### SCIENTIFIC SOCIETIES MEMBERSHIP

- 2014 2018 Member of the International Society for Bayesian Analysis (and EnviBayes section)
- 2013 ... Member of GRASPA-SIS, research group for statistical applications to environmental problems, permanent working group of the Italian Statistical Society
- 2006 2013 Member of GRASPA, the Italian Research Group for Environmental Statistics
- 2006 ... Member of The International Environmetrics Society
- 1993 ... Member of the Italian Statistical Society
- 2019 ... Member of the International Statistical Institute

### RECENT SERVICES IN SCIENTIFIC CONFERENCES ORGANIZATION

- 2021, Member of the Scientific Committee, SIS 2021, 50<sup>th</sup> Conference of the Italian Statistical Society, Pisa
- 2020, Member of the Scientific Committee and of the Organizing Committee, Third international conference on Data Science & Social Research, online.
- 2020, Chair of the Scientific Committee, SIS 2020 (canceled).
- 2019, Session organizer and chairman, 62nd ISI World Statistics Congress, Kuala Lumpur.
- 2019, Chair of the Scientific Committee, TIES-GRASPA 2019, GRASPA-SIS Biennial Conference, TIES European Regional Meeting, Pescara.
- 2018, Member of the Scientific Committee, METMA IX Conference, Montpellier

- 2017, Member of the Scientific Committee, Session organizer and Chairman, TIES-GRASPA 2017 GRASPA-SIS Biennial Conference, TIES European Regional Meeting, Bergamo
- 2017, Discussant, Conference SIS2017 Statistics and Data Science: new challenges, new generations, Firenze
- 2016, Member of the Scientific Committee and Chairman, Workshop Statistical inference for assessing and monitoring natural resources, Siena
- 2016, Session organizer, TIES 2016 The 26th Annual Conference of the International Environmetrics Society, Edinburgh
- 2015, Member of the Scientific Committee and Chair of the Organizing Committee, TIES-GRASPA 2015 Conference, Bari
- 2014, Member of the Scientific Committee and Chairman, Conference DUST 2014 International Conference on Atmospheric Dust, Castellaneta Marina (TA)
- 2014, Chairman, XLVII Scientific Conference of the Italian Statistical Society, Cagliari
- 2014, Member of the Scientific Committee and Chairman, METMA VII GRASPA 14 Conference, Torino

### SERVICES IN SCIENTIFIC JOURNALS AND BOOKS

- 2019 2021, Associate editor, Statistical Methods and Applications (SMA).
- 2020, Editor (with N. Salvati e F. Schirripa Spagnolo) of the book "Book of Short Papers SIS 2020", Italian Statistical Society.
- 2019, Editor (with M. Cameletti e L. Ippoliti) of the book "Proceedings of the GRASPA 2019 Conference", Italian Statistical Society.
- 2014 2018, Associate editor, Journal of Statistical Computation and Simulation (JSCS).
- 2016, Guest editor (with G. Jona Lasinio), Journal of Statistical Computation and Simulation, vol. 86.
- 2013, Guest editor (with A. Fassò and B. Cafarelli), AStA Advances in Statistical Analysis, n. 2, vol. 97.
- 2008, Guest editor (with D. Cocchi and B. Cafarelli), Environmetrics n. 7, vol. 19.
- 2006, Editor (with B. Cafarelli e G. Jona Lasinio) of the book "Spatial Data Methods for Environmental and Ecological Processes Book of Abstracts".

## REFEREE FOR THE FOLLOWING SCIENTIFIC JOURNALS

Advances in Statistical Analyses, Applied Stochastic Models in Businnes and Industry, Atmospheric Environment, Computational Statistics and Data Analysis, Ecological Indicators, Ecological Modelling, Environmentals, Environmental and Ecological Statistics, Environmental Modeling and Asssessment, Environmental Monitoring and Asssessment, Environmental Science and Technology, iForest, International Series, Journal of Statistical Computation and Simulation, Nature Conservation, Statistical Methods and Applications, Stochastic Environmental Research and Risk Assessment, Studies in Theoretical and Applied Statistics.

### SERVICES IN EVALUATION OF RESEARCH AND SELECTION OF RESEARCH STAFF

Research evaluator for MIUR-FIRB (2012 and 2013).

Member of the board of examiners for positions of full and associate professor and researcher in Statistics at the Universities of Venice, Bologna, Bergamo, Torino, Palermo, Roma, Genova and at the Water Research Institute (National Research Council).

Member of the board of examiners of PhD's at University of Palermo, Rome and Salento.

Member of the board of examiners for the best PhD thesis in Statistics prize of the Italian Statistical Society.

#### RESEARCH GRANTS AND CONSULTANCIES

Head of research unit for the National Interest Research Program PRIN 2015, Environmental processes and human activities: capturing their interactions via statistical methods (EPHASTAT).

Member of a research unit for the National Interest Research Program PRIN 2006, Statistical Modeling and Analysis of the Risk for Environmental Spatial-Temporal Systems.

Head of research unit for the National Interest Research Program COFIN 1999, Statistical Mehods and Techniques for the Analysis of Spatial and Spatial-Temporal Data.

Principal investigator for six local research projects on Spatial and Environmental Statistics, Università di Bari (1998 - 2013).

Principal statistical research consultant for the Agronomic Experimental Institute, National Ministry of Agricultural and Forestry Policies (1999 – 2006).

Scientific coordinator of an research agreement between Università di Bari and the regional environmental protection agency ARPA Puglia (2006 – 2013).

Principal statistical research consultant for the research unit in Ecology at the Department of Biology, Università di Bari.

### STATISTICAL LITERACY PROMOTION

Member of the Organizing staff of the Italian Statistics Olympics for the Italian Statistical Society (2017 - 2020).

Member of the working group of the project Statistical Lab for Information and Knowledge, within a project for the promotion of scientific degrees financed by the Italian Ministry of Education (since 2010).

# SUPERVISION OF MASTER AND PHD THESIS (last 12 years)

- 2014 2015 S. Sirressi, Doctorate School in Economics, Businnes and Statistics, Università di Bari.
- 2013 2016 F. Fedele, Models for predicting meteo-chemical parameters over the Taranto area at Doctorate School in Physics, Università di Bari (with R. Bellotti, A. Guarnieri Calò Carducci).
- 2013 C. Calculli, Multivariate hierarchical models for mapping regional air quality data using the ReCaS INFN high performance grid computing infrastructure, Master in Development and management of data centers for high performance scientific computing, Università di Bari.
- 2013 A. Turnone, Definition and application of a spatio-temporal statistical model for monitoring air quality in Apulia (I) using the ReCaS INFN high performance grid computing infrastructure, Master in Development and management of data centers for high performance scientific computing, Università di Bari.
- 2011 2014 S. Arcuti, Space-time modeling of animal population abundances, PhD in Statistics, Università di Bari (with N. Ribecco).
- 2007 2010 C. Calculli, Spatial variation of multiple diseases in relation to an environmental risk source, PhD in Statistics, Università di Bari.
- 2006 2009 A. Nannavecchia, Space-time analysis of air quality in Taranto by a hierarchical Bayesian model, PhD in Statistics, Università di Bari.

## SUPERVISION OF POSTGRADUATE POSITIONS (last 12 years)

- 2018 C. Calculli, Environmental processes and human activities: capturing their interactions via statistical methods, research fellowship, Università di Bari.
- 2014 C. Calculli and A. Turnone, University master in Development and management of data centers for high performance scientific computing, post-master fellowships, Università di Bari.
- 2010 2012 C. Calculli, Statistical models for the evaluation of the effects of athmospheric pollution on people's health, research fellowship, Università di Bari.