# MONIA RANALLI

Curriculum Vitae

Place Roma Date 18/02/2023

# Part I – General Information

Full Name	Monia Ranalli
E-mail	monia.ranalli@uniroma1.it
Spoken Languages	Italian, English (advanced)

# Part II – Education

Type	Year	Institution Notes	(Degree Experience,)
PhD	2014	Università Sapienza	Dissertation title: New perspective on likelihood-based inference for latent and observed Gaussian mixture models. Advisor: Prof. Roberto Rocci Research Interests: Finite Mixture Models, Ordinal Data, Composite Likelihood Methods, Monte Carlo Likelihood
Visiting PhD student in Statistics	2014	Penn State University	Jan 2014 - Nov 2014 Visiting Advisor: Prof. Bruce Lindsay.
Post-graduate studies	2012	Warwick University (UK)	With Distinction Dissertation title: Modelling skewed data. Supervisor: Prof. Mark Steel
University graduation MSc	2011	Università degli Studi di Roma "Tor Vergata"	1
University graduation BSc in Economics & Finance	2009	Università degli Studi di Roma "Tor Vergata"	110/110 cum summa laude Dissertation title: A logit model to estimate the probability of default. Supervisor: Prof. Roberto Rocci
Classical A levels	2006	Liceo Classico "Ugo Foscolo"- Maxisperimentale BROCCA, Albano Laziale-Rome	100/100

# Part III – Appointments

 $IIIA-A cademic\ Appointments$ 

Start	End	Institution	Position
1/9/23		Department of Statistics, Sapienza University of Rome	Associate Professor in Statistics SECS-S/01 13/D1
Jan 21		Department of Statistics, Sapienza University of Rome	Member of the Board (Collegio dei Docenti) for the Ph.D. Programme in Statistics
19/6/20	19/6/29	MUR	Scientific national habilitation (ASN) as Associate Professor of Statistics (Abilitazione Nazionale Professore Associato)
Oct 20		Department of Statistics, Sapienza University of Rome	Member of the board on "Honorous Programmes" ("Percorsi di eccellenza") of the Degree in "Statistics"
Nov 19	Oct 22	Sapienza University of Rome	Elected Member of the Faculty Board (Giunta di Facolt'a) as Representative of researchers of the Department of Statistics. Sapienza University of Rome – Faculty of Information Engineering, Informatics, and Statistics.
Nov 19		Department of Statistics, Sapienza University of Rome	Member of of the board on Quality Assessment of the Degree in "Statistics, Economics and Society". Department of Statistics. Sapienza University of Rome – Faculty of Information Engineering, Informatics, and Statistics.
Nov 19	Oct 22	Department of Statistics, Sapienza University of Rome	Elected Member of the Department Board (Giunta di Dipartimento) as Representative of researchers. Sapienza University of Rome – Department of Statistics.
2/9/19	1/9/22	Department of Statistics, Sapienza University of Rome	Tenure Track Assistant Professor in Statistics Ricercatore SECS-S/01, Legge 240/10 tipo B. Maternity Leave 26/11/2021 – 26/04/2022
3/4/18	2/4/21	Dipartimento di Economia e Finanza - Università degli Studi di Roma "Tor Vergata"	RTDA SECS-S/01 13/D1
3/4/17	31/3/18	Dipartimento di Scienze Politiche – Università Roma Tre	Assegno di Ricerca SECS-S/01 13/D1
1/10/15	30/9/16	Dipartimento di Scienze Politiche – Università Roma Tre	Assegno di Ricerca SECS-S/01 13/D1
12/1/15	11/1/16	Dipartimento di Statistica – Penn State University (USA)	Post-Doc SECS-S/01 13/D1

# Part IV – Teaching experience as Instructor

Year	Institution	Lecture/Course
Oct 22	Department of Statistics,	Statistical Theory (Module II), PhD course in English
	University of Sapienza, Rome	(24 hours, 3CFU).
Oct 21	Department of Statistics, University of Sapienza, Rome	Some applications using R Markdown and R Sweave, contribution in Italian within the
	entiretisty of Suprement, Itome	Honorous Programmes of the Degree in Statistics (4)
		hours).
Spring 21	Department of Statistics, University of Sapienza, Rome	Statistical Theory (Module II), PhD course in English (24 hours, 3CFU).
Spring 21	Department of Engineering, University of Sapienza, Rome	Statistics, course in Italian at Bachelor Degree in Management Engineering (60 hours)
Spring 21	Department of Statistics, University of Sapienza, Rome	Lab of Statistical Software, course in Italian at Bachelor Degree in Statistics (27 hours).
Dec 20	Department of Statistics, University of Sapienza, Rome	Some applications using R Markdown and R Sweave, contribution in Italian within the
		Honorous Programmes of the Degree in Statistics (4 hours).
Fall 20	Department of Economics, University of Tor	Statistics, course in English at Master in Development
	Vergata, Rome	Economics and International
G	Design of Principal History	Co-operation (MESCI).
Spring 20	Department of Engineering, University of Sapienza, Rome	Statistics, course in Italian at Bachelor Degree in Management Engineering (60 hours).
Spring	Department of	Composite Likelihood Methods - PhD course in English
20	Statistics, University of Sapienza, Rome	(8 hours).
Spring 20	Department of Economics and Finance, University of Tor Vergata, Rome	Latent Variable Models - PhD course in English (3 CFU).
Fall 19	Department of Statistics, University of Sapienza, Rome	Lab of Statistical Software, course in Italian at Bachelor Degree in Statistics (36 hours).
Fall 19	Department of Economics, University of Tor	Statistics, course in English at Master in Development
	Vergata, Rome	Economics and International
		Co-operation (MESCI).
Spring 19	Department of Economics and Finance, University of Tor Vergata, Rome	Statistical learning - Undergraduate course in English (2 CFU).
Spring 19	Department of Economics and Finance, University of Tor Vergata, Rome	Latent Variable Models - PhD course in English (3 CFU).
Fa 2018	Università degli Studi di Roma Tor Vergata –	Statistical Tools for Decision-Making (7 CFU;
	Department of Economics and Finance	Descriptive statistics, Introduction to Probability and Inferential Statistics). Undergraduate course in English.
Su 2018	Università degli Studi di Roma Tor Vergata-	Introduction to Statistics (20 h). Preparatory course in
	Department of Economics and Finance	English at Master of Science in European Economy and Business Law.
Sp 2018	Università Roma Tre– Department of Political Sciences	Statistics. Undergraduate course in Italian (8 CFU)
Fa 2017	Università degli Studi di Roma Tor Vergata-	Statistical Tools for Decision-Making (3 CFU;
	Department of Economics and Finance	Descriptive statistics). Undergraduate course in English.
Su 2017	Università degli Studi di Roma Tor Vergata-	Introduction to Statistics. Preparatory course in English
	Department of Economics and Finance	at Master of Science in European Economy and Business Law. (12 h)

Sp 2017	Università Roma Tre– Department of Political Sciences	Statistics. Undergraduate course in Italian (8 CFU)
Sp 2016	Università degli Studi di Roma Tor Vergata- Department of Economics and Finance	Marketing Analytics Lab. Course in English at Master of Science in Big Data in Business (Co-Instructor with Prof. Roberto Rocci)
Fa 2015	Penn State University (USA) – Department of Statistics	STAT462 Applied Regression Analysis. Undergraduate Course in English.
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<i>Y</i> ear	Institution	Lecture/Course
Spring 19	Department of Management and Law, University of Tor Vergata, Rome	SAS Labs for Business Statistics, Graduate course in English. Course Instructor: Prof. Simone Borra
Jan-Feb 19	University of Tor Vergata, Rome	Lab activities in English for Unsupervised learning (MSc in Big Data in Business) Course Instructor: Prof. Roberto Rocci
Fa 2018	Università degli Studi di Roma Tor Vergata— Department of Economics and Finance	Statistical Tools for Decision-Making. Undergraduate course in English. Course instructors: Dr. Monia Ranalli (7 CFU); Prof. Roberto Rocci (2 CFU)
Fa 2018	LUISS – Department of Political Sciences	Statistics. Undergraduate course in English. Instructor: Prof. Roberto Rocci (8 CFU)
Sp 2018	LUISS – Department of Economics and Finance	Statistics. Undergraduate course in English. Instructor: Dr. Alessio Troiani (8 CFU)
Sp 2018	Università degli Studi di Roma Tor Vergata– Department of Management and Law	SAS Labs for Business Statistics. Graduate course in English. Course Instructor: Prof. Simone Borra (6 CFU)
Fa 2017	Università degli Studi di Roma Tor Vergata— Department of Economics and Finance	Statistics. Course in English at Master in Development Economics and International Cooperation. Course instructor: Prof. Roberto Rocci
Fa 2017	LUISS – Department of Political Sciences	Statistics. Undergraduate course in English. Instructor: Prof. Roberto Rocci (8 CFU)
Fa 2017	Università degli Studi di Roma Tor Vergata— Department of Economics and Finance	Statistical Tools for Decision-Making. Undergraduate course in English. Course instructors: Dr. Monia Ranalli (3 CFU); Prof. Roberto Rocci (6 CFU)
Sp 2017	LUISS – Department of Economics and Finance	Statistics. Undergraduate course in English. Instructor: Prof. Brunero Liseo (8 CFU)
Sp 2017	Università degli Studi di Roma Tor Vergata— Department of Management and Law	SAS Labs for Business Statistics. Graduate course in English. Course Instructor: Prof. Simone Borra (6 CFU)
Fa 2016	LUISS – Department of Political Sciences	Statistics. Undergraduate course in English. Instructor: Prof. Roberto Rocci (8 CFU)
Fa 2016	Università degli Studi di Roma Tor Vergata— Department of Economics and Finance	Statistics. Course in English at Master in Development Economics and International Cooperation. Course instructor: Prof. Roberto Rocci
Sp 2016	LUISS – Department of Economics and Finance	Statistics. Undergraduate course in English. Instructor: Prof. Yosef Rinott (8 CFU)
Sp 2016	Università degli Studi di Roma Tor Vergata— Department of Economics and Finance	Lab activities for Unsupervised Learning. Graduate course in English for MSc in Big Data in Business. Instructor: Prof. Roberto Rocci

Fa 2013

Università degli Studi di Roma Tor Vergata– Department of Economics and Finance

Statistics. Undergraduate course in Italian. Prof. Stefano Antonio Gattone (9 CFU)

# Part V - Society memberberships, Awards and Honors

Year	Title
2017	Grant of 500 Euro for accommodation and traveling to attend 2017 CRoNoS Winter Course on Copulabased modeling with R at Birkbeck University of London. (Course Instructors: Prof. Marius Hofert, University of Waterloo, Canada, and Prof. Ivan Kojadinovic, University of Pau, France.)
2016	Best Ph.D. Thesis in Statistics in Italy, awarded by Italian Statistical Societ
2015	Honorable Mention at 2015 Shiny Contest organized by Department of Statistics - Penn State - for Snapshot of Statistical Inference: Point Estimation, Interval Estimation, Hypothesis Testing (in collaboration with Debmalya Nandy).
2011	Departmental Bursary for an MSc in Statistics at the University of Warwick
2010	Part-time collaboration at Faculty of Economics, University of Tor Vergata, Rome Sep 2009-Mar 2010
2011	PhD Scholarship, Department of Statistics, Sapienza University
	Society Memberships: Member of SIS (Italian Statistical Society), Member of ASA (American Statistical Society), Member of MM (Mixture models), a specialized team of CMStatistics (Computational and Methodological Statistics), Member of the Classification Society.

# Part VI - Funding Information [grants as PI-principal investigator or I-investigator]

Year	Title	Program	rant value
2021	Clustering rows and columns in a categorical and mixed-type data matrix	Partecipation to Research Project, Sapienza University. Principal investigator: Martella, F.	
2020	New statistical learning methods for the model-based unsupervised classification of complex data	Partecipation to Research Project, Sapienza University. Principal investigator: Rocci, R.	
2019	Clustering methods for complex, high-dimensional, data	Partecipation to Research Project, Sapienza University. Principal investigator: Alfò, M.	
2018	Environmental processes and human activities: capturing their interactions via statistical methods (EphaStat)	Partecipation to Research Project (local PI: Jona Lasinio, G)	
2014	Dynamic Latent Mixture Model for longitudinal ordinal data	Co-Principal Investigator (with Marino, M.F.), Avvio alla ricerca grant (Young Investigator grant), Sapienza University.	2000
2014	Biclustering using a fuzzy approach	Partecipation to Research Proje (PI Ferraro, MB)	ct
2013	I disegni a due stadi nelle prove cliniche: nuove prospettive metodologiche	Partecipation to Research Project Sapienza University. Principal investigator: Gubbiotti, S	

### Part VII - Research Activities

#### Keywords

Ley words
Mixture Models
Composite Likelihood
Latent Variable Models
EM algorithm
Ordinal data

#### **Brief Description**

- Finite mixture models (and some extensions) used mainly for a clustering purpose
  Methodological aspects mainly focused on finite mixture models (the unboundedness of the likelihood for mixture of Gaussians, identifiability issues of mixture models based on an URV approach along with composite likelihood function
- Estimation methods based on composite likelihood and Monte Carlo likelihood Different real data applications (ChIP-seq data, marine currents, wildfires, social and behavioral data, time series, three-way data)

### Part VIII - Summary of Scientific Achievements

Total Citations	110
Hirsch (H) index	6

#### Part IX-Publications

- 1) Notaristefano G., Merola A., Scarinci E., Ubaldi N., Ranalli M. et al. "Circulating irisin levels in functional hypothalamic amenorrhea: a new bone damage index? A pilot study". Endocrine 77, 168–176 (2022). https://doi.org/10.1007/s12020-022-03050-7.
- Ranalli M., Rocci, R. (2021) "Mixture of factor analyzers for mixed-type data via a composite likelihood approach" Models and Learning for Clustering and Classification pp. 51-56. ISBN: 9788855265393.
- 3) Polistena A, Ranalli M, Avenia S, Lucchini R, Sanguinetti A, Galasse S, Rondelli F, Vannucci J, Patrone R, Velotti N, Conzo G, Avenia N. (2021) "The Role of IONM in Reducing the Occurrence of Shoulder Syndrome Following Lateral Neck Dissection for Thyroid Cancer". J Clin Med. 10(18):4246. doi: 10.3390/jcm10184246. PMID: 34575355; PMCID: PMC8469441.
- 4) Alberto Bucci, Lorenzo Carbonari, Monia Ranalli & Giovanni Trovato (2021) "**Health and economic development: evidence from non-OECD countries**", Applied Economics, 53:55, 6348-6375, DOI: 10.1080/00036846.2021.1939856
- 5) Ranalli, R., Rocci, R. (2021), "Semi-constrained model-based clustering of mixed-type data using a composite likelihood approach". CLADAG 2021 BOOK OF ABSTRACTS AND SHORT PAPERS: 13th Scientific Meeting of the Classification and Data Analysis Group Firenze, pp. 408-411. Editors: Porzio, G. C.; Rampichini, C.; Bocci, C. ISBN: 978-88-5518-340-6.
- 6) Ranalli, R., Rocci, R. (2021), "A comparison between methods to cluster mixed-type data: Gaussian mixtures versus Gower distance", Statistical Learning and Modeling in Data Analysis Methods and Applications. Editors: Balzano, S., Porzio, G.C., Salvatore, R., Vistocco, D., Vichi, M. (in printing).
- 7) Ranalli, M., Martella, F. (2020). "**Model-based approach to biclustering ordinal data**". Book of short papers SIS 2020, pp. 1177-1182. Pearson. ISBN 9788891910776
- 8) Farcomeni, A., Ranalli, M. and Viviani, S. (2020). "Dimension reduction for longitudinal multivariate data by optimizing class separation of projected latent Markov models". TEST, 1-19.
- 9) Lagona, F., Ranalli, M. and Barbi, E. (2020). "A model with space-varying regression coefficients for clustering multivariate spatial count data". Biometrical Journal.
- 10) Ranalli, M., Maruotti, A. (2020) "Model-based clustering for noisy longitudinal circular data, with application to animal movement." Environmetrics 31:e2572. https://doi.org/10.1002/env.2572.
- 11) Ranalli, M., Lindsay, B.G., and Hunter, D. (2020). "A classical invariant solution to the normal mixture problem." Statistica Sinica, 30(3), pp. 1235-1254. https://doi.org/10.5705/ss.202016.0483.

- 12) Maruotti, A., Ranalli, M., Rocci, R. (2019). "Composite likelihood inference for simultaneous clustering and dimensionality reduction of mixed-type longitudinal data" in Cladag 2019, 11th Meeting of the Classification and Data Analysis Group. Book of Short Papers. (ISBN:978-88-8317-108-6).
- 13) Rocci, R., Ranalli, M. (2019). "An INDSCAL based mixture model to cluster mixed-type of data" in Cladag 2019, 11th Meeting of the Classification and Data Analysis Group. Book of Short Papers. (ISBN:978-88-8317-108-6).
- 14) Ranalli, M. (2019). "New perspectives on likelihood-based inference for latent and observed Gaussian mixture models". Best Ph.D. Theses in Statistics and Applications. SIS-CLEUP. ISBN: 9788854950634.
- 15) Ranalli, M., Rocci, R. (2019) "An overview on the URV model-based approach to cluster mixed-type data." Statistical Learning of Complex Data, pp. 45-53. Editors: F. Greselin, L. Deldossi, L. Bagnato and M. Vichi. ISBN 978-3-030-21140-0.
- 16) Ranalli, M., Rocci, R. (2018) "Simultaneous clustering and dimensional reduction of mixed-type data." ASMOD 2018: Proceedings of the International Conference on Advances in Statistical Modelling of Ordinal Data, ISBN 978-88-6887-042-3. doi/10.6093/978-88-6887-042-3. Editors Stefania Capecchi, Francesca Di Iorio, Rosaria Simone.
- 17) Lagona, F., Ranalli, M. (2018) "A multilevel hidden Markov model for space-time cylindrical data." Book of short Papers SIS 2018, ISBN-9788891910233.
- 18) Ameijeiras-Alonso, J., Lagona, F., Ranalli, M., Crujeiras, R.M. (2018) "A circular non-homogeneous hidden Markov field for the spatial segmentation of wildfire occurrences" Environmetrics. 2018;e2501. https://doi.org/10.1002/env.2501.
- 19) Rocci, R., Vichi, M., Ranalli, M. (2017). "Mixture models for simultaneous classification and reduction of three-way data" in Cladag 2017, 10th Meeting of the Classification and Data Analysis Group. Book of Short Papers. ISBN 978-88-99459-71-0.
- 20) Ranalli, M., Lagona, F., Picone, M., and Zambianchi, E. (2017). "Segmentation of sea current fields by cylindrical hidden Markov models: a composite likelihood approach." Journal of the Royal Statistical Society: Series C, vol. 67, p. 575-598, ISSN: 0035-9254, doi: 10.1111/rssc.12240
- 21) Ranalli, M., Rocci, R. (2017). "A model based approach to simultaneous clustering and dimensional reduction of ordinal data." Psychometrika, vol. 82, p. 1007-1034, ISSN: 0033-3123, doi: 10.1007/s11336-017-9578-5
- 22) Ranalli, M., Rocci, R. (2017). "Mixture models for mixed-type data through a composite likelihood approach." Computational Statistics & Data Analysis, 110, 87–102.
- 23) Ranalli, M. (2016). "Recent developments in approximated-likelihood inference methods for latent variable models". Available at SSRN: https://ssrn.com/abstract=2980839. (ISSN: 1556-5068)
- 24) Ranalli, M., Rocci, R.(2016). "Standard and novel model selection criteria in the pairwise likelihood estimation of a mixture model for ordinal data" in Studies in Classification, Data Analysis, and Knowledge Organization. Analysis of Large and Complex Data, 53–68. Editors: Wilhelm, A.F.X. and Kestler, H. A. ISBN 978-3-319-25224-7.
- 25) Ranalli, M., Rocci, R.(2016). "Mixture Models for Ordinal Data: A Pairwise Likelihood Approach", Statistics and Computing, 26(1), 529–547.
- 26) Ranalli, M., Rocci, R. (2015). "A pairwise likelihood approach to simultaneous clustering and dimensional reduction of ordinal data", arXiv preprint:1504.02913 (Ranked third in the paper competition, held during the IFCS 2015 Conference).
- 27) Ranalli, M., Rocci, R. (2015). "Clustering methods for ordinal data: a comparison between standard and new approaches", p. 221-229 in Studies in Classification, Data Analysis, and Knowledge Organization . Advances in Statistical Models for Data Analysis. Editors: Morlini, I., Minerva, T. and Vichi, M. DOI 10.1007/978-3-319-17377-1
- 28) Farcomeni A., Marino M.F., Ranalli, M. (2014). Discussion on "Analysis of Forensic DNA Mixtures with Artefact" by Cowell, Graversen, Lauritzen and Mortera, Journal of the Royal Statistical Society (Series C), 64, 37.
- 29) Ranalli, M., Rocci, R. (2013). "**Mixture models for ordinal data: a pairwise likelihood approach**" in Cladag 2013, 9th Meeting of the Classification and Data Analysis Group. Book of Abstracts. ISBN: 9788867871179, p. 396-399.

#### Manuscripts under review

- 1) Ranalli, M., Rocci, R.. "Composite likelihood methods for parsimonious model-based clustering of mixed-type data." Revised version to be submitted to Advances in Data Analysis and Classification.
- 2) Ranalli, M., Lyu, Y., Li, Q. A statistical framework for measuring reproducibility of heterogenous ChIP-seq data from multiple labs. Manuscript under review.

#### Abstracts

- 1) Ranalli, M., Martella, F. (2020). "Biclustering ordinal data through a model-based approach" 13th International Conference of the ERCIM, ISBN: 978-9963-2227-9-7
- 2) Maruotti, A., Ranalli, M. (2019). "Autoregressive random effects models for circular longitudinal data using the embedding approach". Book of Abstracts of the GRASPA 2019 Conference
- 3) Ranalli, M., Rocci, R. (2018). "Simultaneous clustering and dimensional reduction of mixed-type data". 11th International Conference of the ERCIM, ISBN: 978-9963-2227-5-9.
- 4) Ameijeiras-Alonso, J., Lagona, F., Ranalli, M., Crujeiras, R.M. (2018) **Hidden Markov random fields for the spatial segmentation of circular data**". 11th International Conference of the ERCIM, ISBN: 978-9963-2227-5-9.
- 5) Ranalli M (2017). "A Hidden Markov Approach To the Analysis of Cylindrical Space-time Series". Editors: M. Cameletti and F. Finazzi, Book of Abstracts of the TIES-GRASPA 2017 Conference, Bergamo, 24-26 July, 2017. Special issue of GRASPA Working Papers. Bergamo.ISSN 2037-7738
- 6) Ranalli, M., Rocci, R. (2014). "Mixture models for mixed-type data through a pairwise likelihood approach". 7th International Conference of the ERCIM, ISBN: 9788493782245.
- 7) Ranalli, M., Lindsay, B.G. (2014). "Simulated likelihood for heteroscedastic Gaussian mixture models" (Abstract accepted at JSM conference in Boston, 2-7 August 2014, available at <a href="http://www.amstat.org/meetings/jsm/2014/onlineprogram/AbstractDetails.cfm?abstractid=313507">http://www.amstat.org/meetings/jsm/2014/onlineprogram/AbstractDetails.cfm?abstractid=313507</a>).

#### To submit

1) A hidden Markov approach to the analysis of cylindrical space-time series (with Lagona, F.)

#### Research in the pipeline

- 1) Using Godambe Information in Monte Carlo, integrated, and marginal likelihoods (with Lindsay, B.G. and Hunter D.).
- 2) Composite likelihood inference for simultaneous clustering and dimensionality reduction of mixed-type longitudinal data (with Maruotti, A. and Rocci, R.)
- 3) Mixture models for simultaneous classification and reduction (with Rocci, R. and Vichi, M.)

#### Other publications

1) Translation of the book entitled "Statistics for the Health Sciences: A Non-Mathematical Introduction" (by Christine P Dancey, John Reidy, and Richard Rowe. SAGE.) from English to Italian (with Marino, M.F. and Alunni Fegatelli, D.) - Publisher: Piccin Nuova Libraria S.p.A. (2016)

### Part X- Other Details

### **Educational Activities**

Bachelor degrees supervised

1. Federico Fratoni (Bachelor Degree in Statistics, Sapienza University). Co-supervised with M. Vichi March 2021

MSc degrees supervised

- 2. Dario Scalzo (MSc in Big Data, Tor Vergata University) Jan 2017
- 3. Matteo Tamburri (MSc in Big Data, Tor Vergata University) Jan 2017

Editorial and Refereeing activities

Jan 2023	External Referee of a PhD thesis
since Nov 2020	Associate Editor of Statistics and Probability Letters
since Dec 2014	Extensive reviewing activity for many international journals in Statistics, among which: Annals of Applied Statistics, Metron, ADAC, CSDA, Statistics and Computing, Journal of Statistical Computation and Simulation, Statistical Methods & Applications, Studies in Classification, Data Analysis, and Knowledge Organization (Springer Book)

### Other Activities

1	Open Badge QuID	Jul 2022
	https://openbadges.bestr.it/public/assertions/tz9HJMpfTsi_eiHV7YnDYw	
2	How to choose and design an exam. Come scegliere e progettare una prova d'esame	Dec 2020
	(6	
	hours) promoted by the Quality and Innovation Work Group (QuiD)	
3	Some techniques for active learning. Pratiche didattiche per l'apprendimento attivo	Nov 2020
	promoted by the Quality and Innovation Work Group (QuiD) (6 hours)	
4	How to use IT platforms for effective teaching. Come utilizzare le Piattaforme	Nov 2020
	Informatiche per una didattica efficace (4 hours) promoted by the Quality and	
	Innovation Work Group (QuiD)	
5	Programme for Sapienza Academic Staff promoted by the Quality and Innovation	18 Sept 2020, 21
	Work Group (QuiD)	Sept 2020

# Invited Research Stays

Ghent University (Belgium). Host: Dr. Christopher Ley Sep 2017

# **Scientific Committees**

1	Member of Scientific committee of ERCIM 2021 conference	since Jan 2021
2	Member of Scientific committee of ClaDAG 2021 conference	since Oct 2020

# **Chair Sessions & Organized Sessions**

1	Session organized at ERCIM 2021	Dec 2021
2	Session Modern likelihood methods for model based-clustering organized at ClaDAG 2021	Sept 2021
3	Chair session Recent developments in model-based clustering. ERCIM 2020 (online)	Dec 2020
4	Session Recent developments in model-based clustering organized at ERCIM 2020 (online)	Dec 2020
5	Chair session Discussion Poster Session. MBC2 (online)	Sep 2020
6	Chair session Mixture and Latent Class Models for Clustering. CLADAG 2017 (Milan)	Sep 2017
7	Session Flexible modeling organized at COMPSTAT 2018 (Romania)	Aug 2018

### IT Skills

Microsoft Office, LaTex, R, R Markdown, R Sweave, Stata, SAS, Matlab, Minitab, Bedtools, MEME-chip, Galaxy, FIMO.

# **CONFERENCES & SEMINARS**

### • Invited Talks

Invited Talk at ERCIM 2020	Online Conference	Dec 2020
Invited Talk at ClaDAG 2019	University of Cassino, Italy	Sept 2019
Invited Talk at ERCIM2018	University of Pisa, Italy	Dec 2018
Invited Talk at ASMOD2018	University of Naples, Italy	Oct 2018
Invited Talk at SIS	University of Palermo, Italy	Jun 2018
Invited Talk at ClaDAG	University of Milano-Bicocca, Italy	Sep 2017
Invited Talk at Classification Society Meeting.	University of Missouri, USA	Jun 2016
Invited Talk at ERCIM 2014. Session: Model-		
based clustering for categorical and mixed-type	University of Pisa, Italy	Dec 2014
data		
Invited talk at ECDA Conference	Jacobs University (Bremen), Germany	Jul 2014

### • Contributed Presentations

Condituted 1 resentations			
Talk at Model-Based Clustering and Classification (MBC2)	Online Conference	Sept 2020	
Talk at METMA IX, 9th Workshop on Spatio- temporal modeling,	Montpellier, France	Jun2018	
Talk at TIES-GRASPA 2017	University of Bergamo, Italy	Jul2017	
Talk at Model-Based Clustering and Classification (MBC2)	Catania, Italy	Sept2016	
Talk at COMPSTAT 2016	Oviedo, Spain	Aug2016	
Talk at International Federation of Classification Societies (IFCS)	Bologna, Italy	Jul 2015	
Talk at Model-Based Clustering and Classification (MBC2)	Catania, Italy	Sept2014	
Talk at JSM	Boston, USA	Aug2014	

Talk at the 9th Meeting of the Classification and Data Analysis Group of the Italian Statistical Society (ClaDAG),	University of Modena and Reggio Emilia, Italy	Sep 2013
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• Seminars & Workshops

Semmars & Workshops		
Invited seminar at Department of Statistics	University of Dublin (Dublin) (jointly work with R. Rocci and A. Maruotti)	Jan 2020
Invited seminar at Department of Statistics	University of Florence (Italy) (jointly work with R. Rocci and A. Maruotti)	Nov 2019
Invited seminar at PhD Lunch Seminar	Department of Economics and Finance, Tor Vergata University (Italy) (jointly work with R. Rocci)	Nov 2018
Invited seminar at Center for Statistics - Adolphe Quetelet Seminar Series	Ghent University (Belgium)	Sep2017
Invited seminar at Young Researchers Seminars	Memotef, Sapienza University	Jan2017
Talk at Group Meeting (jointly work with Li Q.)	Penn State University (USA)	May2016
Talk at Genomics Seminars, (jointly work with Li Q.)	Penn State University (USA)	Oct2015
Poster presentation at 2015 Bioinformatics and Genomics Retreat	Penn State University (USA)	Aug2015
Poster presentation at 2015 Rao Conference	Department of Statistics, Penn State University (USA)	May2015
Talk at SMAC (Stochastic Modeling and Computing) seminar	Penn State University (USA), Department of Statistics	Apr2014

# • Attended Conferences

ADISTA 2017	Roma Tre University	Jun 2017
SIS 2013-Advances in Latent Variables	Brescia	Jun 2013
SIS 2012	Rome	Jun 2012
48th Gregynog Statistical Conference	Wales, UK	Apr 2012