

Giuseppe Mignemi

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Citizenship: Italy

Research interests

Bayesian nonparametrics, mixture distributions, hierarchical Bayesian models, inter-rater reliability.

Current position

December 2025 Assistant Professor of Psychometrics and Quantitative Psychology
- Present *Department of Social Sciences*
Kore University of Enna

Former positions

October 2025 - Postdoc Research Fellow,
December 2025 *Department of Statistical Modelling (ICS)*
Czech Academy of Sciences
Research supervisor: Patricia Martinkova

February 2024 - Postdoc Research Fellow,
July 2025 *Bocconi Institute for Data Science and Analytics*
Bocconi University
Research supervisors: Antonio Lijoi and Igor Prünster

Education

October 2020 - **University of Padova** - Italy
December 2023 PhD in Psychometrics, [PhD course in *Psychological Sciences*, XXXVI cycle]
PhD supervisors: Andrea Spoto and Antonio Calcagnì
Accepted *cum laude*.

October 2018 - **University of Padova** - Italy
April 2020 MSc in Social, Work and Communication Psychology
Graduation grade: 110/110 *cum laude*.

September 2015	University of Catania - Italy
- July 2018	BSc Psychological Sciences and Techniques
	Graduation grade: 110/110 <i>cum laude</i> .
September 2021	Selected courseworks
- July 2022	Theory and Method of Statistical Inference, Computational Statistics, Data mining.

Honors and scholarships

2026	Marie Skłodowska-Curie Actions - Seal of Excellence. Quality label awarded under Postdoctoral Fellowships for the project: <i>BABEL - BAyesian Biclustering models for hEterogeneous Learning</i> .
2025	EAM Fellowship for Young Researchers. EAM Mobility Grants for Young Researchers provided by the European Association of Methodology for the project: <i>Robust Confirmatory Factor Analysis</i> .
2025	Early-career Researchers PPLZ Post-doctoral Fellowship. Postdoctoral Research Fellow supported by the Czech Academy of Sciences (PPLZ), conducting independent research within an international academic environment for the project: <i>Capturing Individual Latent Heterogeneity via Flexible Bayesian Models</i> [Two Years Fundings - not taken].
2025	BNP-ISBA Junior Travel Award. Travel support awarded by the Section on Bayesian Nonparametrics of the International Society for Bayesian Analysis. <i>BNP-14 World Meeting</i> , UCLA, Los Angeles (USA), 23-27 June 2025.
2020-2023	Merit-based PhD Fellowship. General Psychology Department - University of Padova.
2020	Mille e una Lode Scholarship. Award for the top 3% best students of each university course.

International Research Experience

December 2022	Statistical modelling of peer grading
- March 2023	Mentors: Irini Moustaki and Yunxiao Chen, London School of Economics [visiting period: 4 months].

September 2022
- December
2022
Mixture polarization in inter-rater agreement analysis: a Bayesian nonparametric index
Mentor: Ioanna Manolopoulou, University College London [visiting period: 3 months].

Teaching experience

March 2024 -
June 2024
Teaching Assistant, Introduction to statistical methods in psychology [25 hours]: undergraduate course in Psychological Science - PS2648 (University of Padova)

Linear models and latent variables models for behavioral sciences.

March 2023 -
June 2023
Teaching Assistant, Introduction to statistical methods in psychology [20 hours]: undergraduate course in Psychological Science - PS2648 (University of Padova)

Linear models and latent variables models for behavioral sciences.

September 2021
- February 2022
Teaching Assistant, Basic research methods [8 hours]: undergraduate course in Psychological Science - PS2192 (University of Padova)
Data cleaning, descriptive statistics and coding with R.

September 2021
- February 2022
Teaching Assistant, Psychometrics [10 hours]: undergraduate course in Psychological Science - PS2192 (University of Padova)
Statistical coding and data analysis for psychological sciences.

September 2021
- December
2021
Teaching Assistant, Psychological testing [20 hours]: undergraduate course in Psychological sciences of development, personality and interpersonal relationships - PS2295 (University of Padova)
Basic inferential statistics and linear algebra for psychometrics.

Communication at conferences and meetings (selected)

22 September
2025
Mignemi, G., Manolopoulou, I.
Bayesian Nonparametric Linear and Generalized Linear Models for Inter-Rater Reliability Analysis [invited talk]
Department of Economy, University of Perugia, Italy

09 September
2025
Mignemi, G., Manolopoulou, I.
Flexible Models for Multiple Raters Data via Nonparametric Priors [invited talk]
15th Scientific Meeting Classification and Data Analysis Group, Napoli, Italy

3 September 2025 **Mignemi, G.**, Panzeri, A., Bruno, G., Spoto, A.
Infinite Dimensional Psychology: Bayesian Nonparametrics in Psychology
European Mathematical Psychology Group meeting, Padova, Italy

26 June 2025 **Mignemi, G.**, Lijoi, A., Pruenster, I.
Nonparametric Estimation of Species Richness via Penalized Gibbs-type Priors
14th International Conference on Bayesian Nonparametrics, Los Angeles, USA

27 May 2025 **Mignemi, G.**, Lijoi, A., Pruenster, I.
Estimation of Species Richness via Penalized Gibbs-type Priors [Poster]
Bayesian Inference in Stochastic Processes workshop, Milan, Italy

20 March 2025 **Mignemi, G.**, Manolopoulou, I.
Bayesian Nonparametric Generalized Rater Models [invited talk]
Centre for Educational Measurement - University of Oslo - Oslo, Norway.

5 December 2024 **Mignemi, G.**, Manolopoulou, I.
Bayesian Nonparametric Models for Multiple Raters: a General Statistical Framework [invited talk]
Computational Psychometrics Group - Czech Academy of Sciences - Prague, Czech Republic.

16 July 2024 **Mignemi, G.**, Manolopoulou, I.
Bayesian nonparametric HETOP models for rating data
89th annual meeting of the Psychometric Society. Prague, Czech Republic.

20 June 2024 **Mignemi, G.**, Chen, Y., Moustaki, I.
Statistical Analysis of Peer Grading: A Latent Variable Approach
52st scientific meeting of Italian Statistical Society - Bari, Italy.

23 November 2023 **Mignemi, G.**, Chen, Y., Moustaki, I.
Network of Peer Gradings: A Latent Variable Approach [invited talk]
Social Statistics Lab - London School of Economics - London, UK

11 September 2023 **Mignemi, G.**, Manolopoulou, I., Calcagnì, A.
Groups heterogeneity in classification tasks: a Bayesian nonparametric approach
Cladag 2023 - Salerno, Italy.

10 July 2023 **Mignemi, G.**, Manolopoulou, I.
Inter-rater reliability in heterogeneous samples: a Bayesian semi-parametric approach [Poster]
Greek Stochastics v', Contemporary Bayesian Inference, Naxos, Greece, 7-10 July 2023.

27 January 2023 **Mignemi, G.**, Manolopoulou, I.
 Inter-rater Agreement and cluster polarization: a Bayesian semi-parametric approach
 [invited talk]
Social Statistics Lab - London School of Economics - London, UK

15 July 2022 **Mignemi, G.**, Calcagnì, A., Spoto, A.
 A latent thresholds model in rating tasks and inter-rater agreement
87th annual meeting of the Psychometric Society. Bologna, Italy.

24 June 2022 **Mignemi, G.**, Manolopoulou, I., Spoto, A., Calcagnì, A.
 Latent thresholds model in classification tasks
51st scientific meeting of Italian Statistical Society - Caserta, Italy.

21 November 2021 **Mignemi, G.**
 The Power of Statistical Power: the Sample Size in Social Psychology [invited talk]
SpecoLab, DPSS, University of Padova, Italy

Publications

In preparation **Mignemi, G.**, Tancini, D., Bartolucci, F. Enriched Infinite Hidden Markov Models
Mignemi, G., Martinkova, P., Panzeri, A., Bruno, G., Spoto, A. Infinite Dimensional Psychology: Introduction to Discrete Nonparametric Priors for Latent Profile Analysis
 Lijoi, A., **Mignemi, G.**, Prunster, I. Bayesian estimation of species richness with personalized Gibbs-type priors. [GM1]
Mignemi, G., Martinkova, P., Paganin, S. Dynamic Extended Generalized Many-Facet Rasch model. [GM2]

Published **Mignemi, G.**, Manolopoulou, I. Bayesian Nonparametric Models for Multiple Raters: a General Statistical Framework. *Psychometrika*, Published online, 1-36. [GM3]
Mignemi, G., Chen, Y., Moustaki, I. (2025) Unfolding the Network of Peer Grades: A Latent Variable Approach. *Psychometrika*, 90(3), 1153-1174. [GM4]
Mignemi, G., Chen, Y., Moustaki, I. (2025). Statistical Analysis of Peer Grading: A Latent Variable Approach. In: *Proceedings from 52st scientific meeting of Italian Statistical Society (SIS)*, 22-24 June 2024, Bari, Italy. [GM5]

Mignemi, G., Calcagnì, A., Spoto, A., Manolopoulou, I. (2024). Mixture polarization in inter-rater agreement analysis: a Bayesian nonparametric index. *Statistical Methods and Applications*, 33, 325–355. [\[GM6\]](#)

Mignemi, G., Manolopoulou, I., Calcagnì, A. Groups heterogeneity in classification tasks: a Bayesian nonparametric approach. In: *Proceedings from 14th Scientific Meeting of the Classification and Data Analysis Group (Cladag)*, Salerno, September 11-13, 2023. ISBN: 9788891935632. [\[GM7\]](#)

Mignemi, G., Manolopoulou, I., Spoto, A., Calcagnì, A. Latent thresholds model in classification tasks. In: *Proceedings from 51st scientific meeting of Italian Statistical Society (SIS)*, 22-24 June 2022, Caserta, Italy. ISBN 9788891932310. [\[GM8\]](#)

Collaborations in Social Sciences

Vicovaro, M., **Mignemi, G.**, Nucci, M., Bolognani, L., Iannattone, S., Bruno, G., and Spoto, A. (2025). A new Bayesian method for the estimation of emergency nurses' thresholds and agreement in the context of telephone triage. *Frontiers in Psychology*, 16, 1477844. [\[GM9\]](#)

Riccardi, A., Barbadoro, F., Margoni, M., **Mignemi, G.**, Pucci, V., Mondini, S., ... and Gallo, P. (2024). Neuropsychological Awareness in Pediatrics (NAP): proposal of a new cognitive self-report questionnaire for pediatric Multiple Sclerosis patients. *Multiple Sclerosis and Related Disorders*, 106251. [\[GM10\]](#)

Iannattone, S., **Mignemi, G.**, Pivetta, E., Gatta, M., Sica, C., Cardi, V., Canale, N., Spoto, A., Bottesi, G. (2024). Are anxiety, depression, and stress distinguishable in Italian adolescents? an examination through the Depression Anxiety Stress Scales-21. *PloS one*, 19(2), e0299229. [\[GM11\]](#)

Panzeri, A., **Mignemi, G.**, Bruno, G., Granziol, U., Scalavicci, C., Bertamini, · Marco, Bennett, K. M., Spoto, A., Vidotto, G. (2023). The role of the COVID-19 impersonal threat strengthening the associations of right-wing attitudes, nationalism and anti-immigrant sentiments. *Current Psychology*, 1, 3. [\[GM12\]](#)

Mignemi, G., Panzeri, A., Granziol, U. et al. (2022). The mediating role of scientific-medical satisfaction between COVID-19 conspiracy beliefs and vaccine confidence: a two-waves structural equation model. *Journal of Behavioral Medicine*, 46, 201–211. [\[GM13\]](#)

Panzeri, A., Bettinardi, O., Bottesi, G., Bertolotti, G., Brambatti, G., Monfredo, M., **Mignemi, G.**, Bruno, G., Vidotto, G., Spoto, A., Frattola, P., Chiesa, S. (2022) Assessment of perceived support in the context of emergency: Development and validation of the psycho-social support scale. *Current Psychology*. [\[GM14\]](#)

Shevlin, M., Butter,..., **Mignemi, G.**, Spoto, V., Vidotto, G., Bentall, R. P. (2022). Measurement invariance of the Patient Health Questionnaire (PHQ-9) and Generalized Anxiety Disorder scale (GAD-7) across four European countries during the COVID-19 pandemic. *BMC psychiatry*, 22(1), 154. [\[GM15\]](#)

Maeran, R., **Mignemi, G.** (2022). *Psicologia del turismo, nuove forme interattive di consumo*. Bologna: Patron Editore. [\[GM16\]](#)

Maeran, R., **Mignemi, G.** (2021). The role of consumer-brand engagement in tourism consumption: from user-generated content to my generated content. *Testing, Psychometrics, Methodology in Applied Psychology*, Vol. 28, pp. 505-520. [\[GM17\]](#)

Open packages and software

RatersBNP R package for the flexible analysis of rater-mediated assessments. It implements the method detailed in [\[GM3\]](#).
[Github repository](#)

GibbsSpecies R package for the species richness estimation via mixtures of symmetric Dirichlet distributions. It allows for the direct implementation of the method proposed in [\[GM1\]](#).
[Github repository](#)

Service to profession

Referee service: *Psychometrika*
Journal of Educational and Behavioral Statistics
British Journal of Mathematical and Statistical Psychology
Behavior Research Methods
Frontiers in Psychology: Quantitative Psychology and Measurement
Vaccine

Research network

Membership: *COMputational PSychometrics Group (ICS-CAS)*

BayesLab (Bocconi University)

Psychometric Lab (LSE)

Quantitative Psychology Lab (University of Padova)

Memberships in scientific societies

2025 – Present	Association for Psychological Sciences
2025 – Present	European Association of Methodology
2024 – Present	International Society of Bayesian Analysis
2022 – Present	Italian Statistical Society
2022 – Present	Psychometric Society
2022 – Present	Associazione Italiana di Psicologia

Technical skills

Programming languages

Familiar with: C, C++, Python.

Software

LaTeX, R, Mathematica, STAN, Nimble, MATLAB.

Languages

English (fluent), French (basic), Spanish (basic).

Privacy declaration

I give consent to process my data with the purpose of the recruitment process, in accordance to the Regulation of the European Parliament 679/2016, regarding the protection of natural persons and free movement of such data. According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV and application for recruiting purposes.