

Giuseppe Mignemi

giuseppe.mignemi@unibocconi.it • +39 3887768008

Citizenship: Italy

Current position

February 2024 - Postdoc Research Fellow, Bocconi Institute of Data Science and Analytics
Research supervisors: Antonio Lijoi and Igor Prünster

Research interests

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

Education

October 2020 - **University of Padova** - Italy
December 2023 PhD in Psychometrics, [PhD course in *Psychological Sciences*, XXXVI cycle]
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 *cum laude*.

September 2021 **Selected courseworks**
- July 2022 Theory and method of statistical inference, Computational statistics, Data mining.

Honors and scholarships

2025 **BNP-ISBA Junior Travel Award.**
Travel support awarded by the Section on Bayesian Nonparametrics of the International Society for Bayesian Analysis. *BNP-14 World Meeting*, 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 **Mixture polarization in inter-rater agreement analysis: a Bayesian nonparametric index**
- December 2022 Mentor: Professor Ioanna Manolopoulou, University College London [visiting period: 3 months].

Teaching experience

March 2024 - **Teaching Assistant, Introduction to statistical methods in psychology [25 hours]: undergraduate course in Psychological Science - PS2648 (University of Padova)**
June 2024 Linear models and latent variables models for behavioral sciences.

March 2023 - **Teaching Assistant, Introduction to statistical methods in psychology [20 hours]: undergraduate course in Psychological Science - PS2648 (University of Padova)**
June 2023 Linear models and latent variables models for behavioral sciences.

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

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

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

Communication at conferences and meetings (selected)

- 20 March 2025 **Mignemi, G.**, Manolopoulou, I.
Generalized Bayesian Nonparametric 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., Calcagni, 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 ν' , 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.**, Calcagni, 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 **Mignemi, G.**
2021 The Power of Statistical Power: the Sample Size in Social Psychology [invited talk]
SpecoLab, DPSS, University of Padova, Italy

Publications

- In preparation** Lijoi, A., **Mignemi, G.**, Prunster, I. Bayesian Nonparametric Estimation of Species Richness. [GM1]
- Mignemi, G.**, Paganin, S. Extended Many-Facet Rasch Models. [GM2]
- Under review** **Mignemi, G.**, Manolopoulou, I. Bayesian Nonparametric Models for Multiple Raters: a General Statistical Framework. [GM3]
- Spoto, A., Vicovaro, M., Granziol, U., Bruno, G., Panzeri, A., **Mignemi, G.**, Nucci, M. Estimating inter-rater reliability in dichotomous classification tasks: the problem of large threshold differences among multiple raters. [GM5]
- Published** **Mignemi, G.**, Chen, Y., Moustaki, I. [Fortcoming] Unfolding the Network of Peer Grades: A Latent Variable Approach. Psychometrika. [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. [GM6]
- 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.[GM7]
- 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. [GM8]
- 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. [GM9]

**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. [\[GM10\]](#)

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. [\[GM11\]](#)

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. [\[GM12\]](#)

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. [\[GM13\]](#)

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. [\[GM14\]](#)

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*. [\[GM15\]](#)

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. [\[GM16\]](#)

Maeran, R., **Mignemi, G.** (2022). *Psicologia del turismo, nuove forme interattive di consumo*. Bologna: Patron Editore. [\[GM17\]](#)

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. [\[GM18\]](#)

Packages and software

RatersBNP	R package for the flexible analysis of rater-mediated assessments. It implements the method detailed in [GM3] .
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] .

Memberships in scientific societies

2024 – Present	International Society of Bayesian Analysis - BNP Section
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.