

# Giuseppe Mignemi

giuseppe.mignemi@unibocconi.it • +39 3887768008

Citizenship: Italy

## Research interests

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

## Upcoming position

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

## Former position

February 2024 - Postdoc Research Fellow,  
July 2025 *Bocconi Institute of 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 Calcagni  
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**  
June 2024      **hours]: undergraduate course in Psychological Science - PS2648 (University of Padova)**  
Linear models and latent variables models for behavioral sciences.

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

September 2021 - February 2022	<b>Teaching Assistant, Basic research methods [8 hours]: undergraduate course in Psychological Science - PS2192 (University of Padova)</b> Data cleaning, descriptive statistics and coding with R.
September 2021 - February 2022	<b>Teaching Assistant, Psychometrics [10 hours]: undergraduate course in Psychological Science - PS2192 (University of Padova)</b> Statistical coding and data analysis for psychological sciences.
September 2021 - December 2021	<b>Teaching Assistant, Psychological testing [20 hours]: undergraduate course in Psychological sciences of development, personality and interpersonal relationships - PS2295 (University of Padova)</b> Basic inferential statistics and linear algebra for psychometrics.

### Communication at conferences and meetings (selected)

20 March 2025	<b>Mignemi, G.</b> , Manolopoulou, I. Generalized Bayesian Nonparametric Rater Models [invited talk] <i>Centre for Educational Measurement - University of Oslo - Oslo, Norway.</i>
5 December 2024	<b>Mignemi, G.</b> , Manolopoulou, I. Bayesian Nonparametric Models for Multiple Raters: a General Statistical Framework [invited talk] <i>Computational Psychometrics Group - Czech Academy of Sciences - Prague, Czech Republic.</i>
16 July 2024	<b>Mignemi, G.</b> , Manolopoulou, I. Bayesian nonparametric HETOP models for rating data <i>89th annual meeting of the Psychometric Society. Prague, Czech Republic.</i>
20 June 2024	<b>Mignemi, G.</b> , Chen, Y., Moustaki, I. Statistical Analysis of Peer Grading: A Latent Variable Approach <i>52st scientific meeting of Italian Statistical Society - Bari, Italy.</i>
23 November 2023	<b>Mignemi, G.</b> , Chen, Y., Moustaki, I. Network of Peer Gradings: A Latent Variable Approach [invited talk] <i>Social Statistics Lab - London School of Economics - London, UK</i>
11 September 2023	<b>Mignemi, G.</b> , Manolopoulou, I., Calcagni, A. Groups heterogeneity in classification tasks: a Bayesian nonparametric approach <i>Cladag 2023 - Salerno, Italy.</i>

- 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.**, 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., Calcagni, 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**     Lijoi, A., **Mignemi, G.**, Prunster, I. Bayesian Nonparametric Estimation of Species Richness. [GM1]
- Mignemi, G.**, Paganin, S. Bayesian Semiparametric 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*. Published online, 1-22. [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.**, Calcagni, 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., Calcagni, 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., Calcagni, 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., Scalavizzi, 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: *British Journal of Mathematical and Statistical Psychology*

*Frontiers in Psychology: Quantitative Psychology and Measurement*

## 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 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

TeX, 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.