

Giuseppe Mignemi

mignemi@cs.cas.cz • +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 **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., 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 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. 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.**, 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: *Psychometrika*
British Journal of Mathematical and Statistical Psychology
Behavior Research Methods
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.