

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

## Honors and scholarships

|           |   |
|-----------|---|
| 2025      | <b>EAM Fellowship for Young Researchers.</b><br>EAM Mobility Grants for Young Researchers provided by the European Association of Methodology for the project: <i>Robust Confirmatory Factor Analysis</i> .   |
| 2025      | <b>Early-career Researchers PPLZ Post-doctoral Fellowship.</b><br>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      | <b>BNP-ISBA Junior Travel Award.</b><br>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 | <b>Merit-based PhD Fellowship.</b><br>General Psychology Department - University of Padova.   |
| 2020      | <b>Mille e una Lode Scholarship.</b><br>Award for the top 3% best students of each university course.   |

## International Research Experience

|                 |   |
|-----------------|---|
| December 2022   | <b>Statistical modelling of peer grading</b>  |
| - March 2023    | Mentors: Irini Moustaki and Yunxiao Chen, London School of Economics [visiting period: 4 months]. |
| September 2022  | <b>Mixture polarization in inter-rater agreement analysis: a Bayesian nonparametric index</b>     |
| - December 2022 | Mentor: Ioanna Manolopoulou, University College London [visiting period: 3 months].               |

## Teaching experience

|                                      |   |
|--------------------------------------|---|
| March 2024 -<br>June 2024            | <b>Teaching Assistant, Introduction to statistical methods in psychology [25 hours]: undergraduate course in Psychological Science - PS2648 (University of Padova)</b><br>Linear models and latent variables models for behavioral sciences.                                  |
| March 2023 -<br>June 2023            | <b>Teaching Assistant, Introduction to statistical methods in psychology [20 hours]: undergraduate course in Psychological Science - PS2648 (University of Padova)</b><br>Linear models and latent variables models for behavioral sciences.                                  |
| September 2021<br>- February 2022    | <b>Teaching Assistant, Basic research methods [8 hours]: undergraduate course in Psychological Science - PS2192 (University of Padova)</b><br>Data cleaning, descriptive statistics and coding with R.  |
| September 2021<br>- February 2022    | <b>Teaching Assistant, Psychometrics [10 hours]: undergraduate course in Psychological Science - PS2192 (University of Padova)</b><br>Statistical coding and data analysis for psychological sciences.  |
| September 2021<br>- December<br>2021 | <b>Teaching Assistant, Psychological testing [20 hours]: undergraduate course in Psychological sciences of development, personality and interpersonal relationships - PS2295 (University of Padova)</b><br>Basic inferential statistics and linear algebra for psychometrics. |

## Communication at conferences and meetings (selected)

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|----------------------|--|
| 22 September<br>2025 | <b>Mignemi, G.</b> , Manolopoulou, I.<br>Bayesian Nonparametric Linear and Generalized Linear Models for Inter-Rater Reliability Analysis [invited talk]<br><i>Department of Economy, University of Perugia, Italy</i> |
| 09 September<br>2025 | <b>Mignemi, G.</b> , Manolopoulou, I.<br>Flexible Models for Multiple Raters Data via Nonparametric Priors [invited talk]<br><i>15th Scientific Meeting Classification and Data Analysis Group, Napoli, Italy</i>      |
| 3 September<br>2025  | <b>Mignemi, G.</b> , Panzeri, A., Bruno, G., Spoto, A.<br>Infinite Dimensional Psychology: Bayesian Nonparametrics in Psychology<br><i>European Mathematical Psychology Group meeting, Padova, Italy</i>               |

- 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. [\[GM6\]](#)

## Collaborations in Social Sciences

**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]

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 scientifical-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.