

## **International summer school**

# **MULTILEVEL MODELING: APPLICATIONS TO CROSS-SECTIONAL AND LONGITUDINAL DESIGNS**

**June 6-10, 2022 - ONLINE**

~~Department of Psychology and Cognitive Science, University of Trento  
Corso Bettini, 84 Rovereto (TN)~~

### **Scope and goals**

Researchers often are interested in estimating relationships between variables that reside at different levels of analysis (e.g., day, individual, group, organization). For instance, is a work group's support climate related to individual performance? Does the relationship between daily stress and wellbeing depend on individual extroversion? To estimate these relationships between variables that span across different levels of analysis, researchers must use Multilevel Modeling Methods.

The goal of this course is to learn how to use Multilevel Modeling Methods to analyze nested data in cross-sectional and longitudinal designs. Participants will be able to understand the logic underlying multilevel analysis, build multilevel models, analyze multilevel data in cross-sectional and longitudinal designs, and interpret the results obtained appropriately.

Regarding teaching methods, the course will combine instructor presentations, guided practical exercises, and autonomous practical exercises.

The course is open to national and international PhD students and Faculty members who want to improve their analytic skills in the area of Multilevel Modeling Methods.

### **Contents**

The course will cover the following contents:

1. Introduction: The Logic Underlying Multilevel (ML) Modeling Methods
2. The consequences of disregarding the nested structure of data
3. Types of effects and parameters
4. Basic Multilevel Models in cross-sectional designs
5. Estimation using SPSS and Mplus
6. Extending the logic of Multilevel Modeling to longitudinal designs
7. Multilevel models to investigate within-subject change by using growth models
8. Estimation using SPSS and Mplus
9. Multilevel models to predict within-subject change
10. Estimation using SPSS and Mplus

**Schedule:**

	<b>MONDAY</b>	<b>TUESDAY</b>	<b>WEDNESDAY</b>	<b>THURSDAY</b>	<b>FRIDAY</b>
<i>MORNING</i> 9.00am-1.00pm		Basic Multilevel Models in cross-sectional designs	Extending the logic of Multilevel Modeling to longitudinal designs	Multilevel models to investigate within-subject change by using growth models	Multilevel models to predict within-subject change  Estimation using SPSS and Mplus  Closing & farewell
<i>AFTERNOON</i> 2.30pm-5.00pm	Introduction: sections 1, 2, & 3	Estimation using SPSS and Mplus	Estimation using SPSS and Mplus	Estimation using SPSS and Mplus	

**International Lecturer:** Prof. Vicente González-Romá, Idocal, University of Valencia, Spain

**Software requirements:**

Participants must have their laptop with SPSS and the demo version of Mplus\* installed (\*downloadable at: <https://www.statmodel.com/>).

**Fees:**

Senior AIP members: euro 350

Junior AIP members: euro 250

Not AIP members: euro 400

**Application:**

The applications will be selected on specific requirements, taking into account the overall number of participants. **DEADLINE: 22<sup>th</sup> of MAY 2022.**

To apply fill in the form at this link: <https://forms.gle/UZh99cRYEHhb1afx8>.

**Selection criteria for applications**

Participants' selection by the scientific committee will be based on three criteria:

- a) **Career.** Priority to younger researchers (PhD students, research fellows and post doc, temporary assistant professors, researcher with tenure).
- b) **Research area.** Priority to researchers who work on organizational psychology topics.
- c) **Researchers university.** The selection will try to facilitate the participation of the greater number of universities (Doctoral schools and Departments).

**Scientific Committee**

Margherita Brondino, University of Verona

Margherita Pasini, University of Verona

Monica Molino, University of Turin

**Organizer Committee**

Lorenzo Avanzi, University of Trento

Margherita Brondino, University of Verona

Guendalina Graffigna, Catholic University of the Sacred Heart of Milan

Dina Guglielmi, University of Bologna

Amelia Manuti, University of Bari

Monica Molino, University of Turin