



Longitudinal analysis of measurement scales – CURVIMIX

June 14th, 2022 (6 hours)

Location : Carreire campus - University of
Bordeaux

Training fees :

Individual participation: €150

Institutional participation : €300

Coordinator :

- Cécile PROUST-LIMA (Coordinator)

Objectives

- › Understand the specific nature of measurement scales and the issue of curvilinearity
- › Understand the notion of a latent variable (or latent process in a longitudinal framework) underlying the observations of one or multiple measurement scales
- › Understand the methodology of the latent process mixed model
- › Being able to estimate mixed models adapted to measurement scales in R using lcmm package
- › Being able to interpret the results of such analysis

Module Program

- › Introduction to the statistical issues induced by measurement scales
- › Brief recap of the linear mixed model theory for longitudinal data
- › The latent process mixed model : specification, estimation, interpretation using real data examples
- › Practice session in R: how to estimate such models with R package lcmm
- › Extensions to multiple scales/items measuring the same latent construct
- › Discussion of the close link with the item response theory and longitudinal latent variable models

Requirements

Prior knowledge of the linear mixed model theory

At least a basic level in R