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