



## GUEST LECTURE

# On a Latent Variable Modeling Approach to Examining Population Heterogeneity in Finite Mixture Settings

**Guest:** Professor Tenko Raykov, Ph.D., Michigan State University  
**Date:** Thursday, December 8, 2016  
**Time:** 14:00-16:00 (s.t.)  
**Place:** Room 104, LifBi, Wilhelmsplatz 3

### Abstract

A latent variable modeling procedure for examining whether a studied population could be a mixture of 2 or more latent classes is discussed. The approach can be used to evaluate a single-class model against competing models of increasing complexity for a given set of observed variables without making any assumptions about their within-class interrelationships. The method is helpful in initial stages of finite mixture analyses to assess whether models with 2 or more classes should be subsequently considered as opposed to a single-class model. The discussed procedure is illustrated with a numerical example.

**Keywords:** conditional independence, latent class analysis, model selection, single-class model, unobserved heterogeneity, within-class model