

IMPS 2008
PLANNED SESSIONS

KEYNOTE LECTURES

Thomas Griffiths (UC Berkeley) *Markov Chain Monte Carlo with People*
David Kenny (Univ Connecticut) *Themes in Dyadic Data Analysis*
Bengt Muthén (UCLA) *Exploratory Structural Equation Modeling*

INVITED LECTURES

Ralitza Gueorguieva (Yale Univ) *Modeling Longitudinal Trajectories Using Growth and Growth Mixture Models*
Kristin Javaras (Harvard Univ) *Latent Variable Models for Likert Attitude Data*
Michael Lee (UC Irvine) *Bayesian Graphical Modeling for Cognitive Science*
Jacqueline Leighton (Univ Alberta) *Cognitive Diagnostic Assessment for Education: Theory and Practice*
Sophia Rabe-Hesketh (UC Berkeley) *Latent Variable Modeling (precise topic and title to be announced)*
Shohei Shimizu (The Institute of Statistical Mathematics, Tokyo) *Use of Non-Gaussianity for Structural Equation Models: Application to Causal Inference*

STATE-OF-THE-ART LECTURES

PCA—Jos ten Berge (Univ Groningen, The Netherlands)
Quality of Life Measurement—David Cella (Northwestern Univ)
Item Factor Analysis—Michael Edwards (Ohio State Univ)
After the MCMC Wave—Brian Junker (Carnegie Mellon Univ)
k-Means Clustering—Douglas Steinley (Univ Missouri-Columbia)
Latent Class Analysis / Mixture Models—Jeroen Vermunt (Univ Tilburg, The Netherlands)

TRAINING SESSIONS / WORKSHOPS

Preconference day, Sunday, June 29

Models for Longitudinal and Incomplete Data

Geert Molenberghs & Geert Verbeke (U. Hasselt & K.U. Leuven, Belgium)

From the modeler's and applications' perspectives, linear mixed models for continuous hierarchical data, as well as marginal (GEE) and mixed-effects models for non-Gaussian data, are presented. When analyzing hierarchical and longitudinal data, one is often confronted with missing observations. Issues arising and ways to overcome them will be discussed. The developments are illustrated using worked examples; their software implementations are discussed in generic terms.

Fitting Mixed-Effects Models Using the lme4 Package in R

Douglas Bates (Univ Wisconsin)

This workshop will describe the use of the lme4 package for fitting and analyzing mixed models in some common settings, such as longitudinal data, and other types of data for which mixed models may be appropriate but have not been widely used because of computational

barriers. Various models will be discussed, including item response models, also for data with random effects for crossed factors, such as a generalized nonlinear mixed model with crossed random effects, with random effects for student abilities and for item difficulties and discriminations.

Advanced Latent Variable Mixture Modeling Using Mplus

Bengt Muthén & Linda Muthén (UCLA, Muthén & Muthén)

The workshop focuses on models that use categorical latent variables, either alone or together with continuous latent variables, based on the general modeling framework of the Mplus program (www.statmodel.com). The theme is latent classes corresponding to different groups of individuals, and to different groups of level 2 units such as schools in multilevel data, as well as latent trajectory classes corresponding to different types of development. An overview of conventional and new techniques is given. Issues of model specification, identification, estimation, testing, and model modification are discussed. Several examples are examined, input setups are provided and output is used for interpretation of analysis results.

INVITED SYMPOSIA

FREE SESSIONS

GRADUATE STUDENT CAREER SESSION BEST JUNIOR PRESENTATION PRIZE

POSTER SESSION WITH RECEPTION AND BEST POSTER PRIZE

Updated information on these and other conference sessions and activities
will be posted at the website as it becomes available.

<http://www.psychometricsociety.org/meeting/2008/index.html>