Call for Papers for Special Issue on

Advances in Latent Variables: Methods, Models and Applications

The journal *Advances in Data Analysis and Classification* will publish a Special Issue on **Advances in Latent Variables: Methods, Models and Applications.**

Starting from Spearman's 1904 pioneering work on factor analysis, latent variable models have witnessed an ever increasing, even though sometimes controversial, diffusion in the statistical literature. They have been extended to deal with different kinds of data structures and thereby helped to analyze more and more complex situations. Finally they turned out to be both a powerful instrument for a better understanding of reality and a necessary tool to perform dimension reduction.

With the development of refined latent variable models new computational algorithms have been designed that rendered the corresponding parameter estimation fast and reliable. New research lines have incorporated latent variables as a necessary building block.

This Special Issue of the journal ADAC is designed to collect a range of innovative and high quality research papers on new challenges and recent developments in the field of latent variable models and their application to real problems. Topics of particular interest may include, but are not limited to:

-- Confirmatory and Exploratory Factor Analysis (FA),
-- Latent Trait Analysis,
-- Latent Class Analysis,
-- Probabilistic linear and non-linear Principal Component (PCA),
-- Sparse PCA or FA,
-- Mixture models,
-- Structural Equation modeling,
-- PLS path modeling.

Researchers are invited to submit their manuscripts for this Special Issue.

Submission details: The full paper should not exceed 15 pages (A4 or Letter size with 12 point), including illustrations and tables. The front page of the manuscript must contain a concise and informative title, the names, affiliations, postal and e-mail addresses of all authors, telephone, and fax number of the corresponding author, an abstract of 8–10 lines, and 4–6 keywords which can be used for indexing purposes. Further formatting instructions are given on the journal's homepage http://www.springer.com/journal/11634. The manuscript should be electronically submitted as a pdf file by Springer's Editorial Manager on the ADAC website and qualified as a paper for this special issue.

Important dates:
• Submission of manuscripts: May 30, 2014 (earlier submissions are explicitly encouraged).
• Notification to authors after reviewing: November 30, 2014 (tentative).
• Final papers for the Special Issue: February 2015 (tentative).

Guest editors:
Angela Montanari, Department of Statistical Sciences, University of Bologna.
Maurizio Vichi, Department of Statistical Sciences, Sapienza University of Rome.