<p style="text-align:center">Biometrical Journal – Special Issue</p>

<p style="text-align:center">Call for Papers: Latent Variable Models for longitudinal data
Guest Editors of the Special Issue: Francesco Bartolucci and Paolo Giordani</p>

With this call we aim at stimulating authors to submit novel contributions in the field of latent variable models to handle longitudinal data in biomedical and life sciences.

In the last decades, latent variable models have found an important field of application in the context of life sciences. Their use is justified by the complexity of the biological systems, with implications in terms of sophisticated dependencies between observable variables. In particular, through versions of these models which are specially tailored to the analysis of longitudinal data, it is possible to account for individual-specific unobserved heterogeneity. Moreover, in longitudinal studies it may occur that only few units present complete data records, as individuals participating into the study typically leave it before its designed end. If this depends on events associated with the outcome of interest, an informative drop-out arises that must be properly modelled. Latent variable models for longitudinal data can also account for this aspect in a sensible way.

The focus of the special issue is on:
- novel statistical approaches based on latent variables, with either continuous or discrete distribution, to analyse longitudinal data;
- up-to-date case longitudinal studies in the biometrical domain carried out by latent variable models.

The papers submitted to the special issue must be motivated by a relevant biometrical application or contain at least one biometrical example as an illustration of new methods. Reproducible research is supported: authors are strongly encouraged to submit computer code and data sets used to illustrate the proposed models. Critical review papers without any novel aspect do not fit the aims of the special issue. Purely theoretical papers as well as heavily computational papers without proper motivations and applications are discouraged. Authors, who are not sure whether their research falls or not under this call, may show an initial draft of the paper and ask a preliminary opinion to the Special Issue Editors, who are Francesco Bartolucci (University of Perugia, IT) and Paolo Giordani (University of Rome – La Sapienza, IT).

All submitted papers under this call will undergo the standard review process of the journal. The deadline for paper submission is February 28, 2016.

Paper submitted to the special issue are handled through the website of the *Biometrical Journal* (http://mc.manuscriptcentral.com/biomj) as any other paper submitted to the journal, except that the editing and the review process is managed by the Special Issue Editors.

To submit to the special issue, authors must proceed through Manuscript Central (website given above), indicate at Step 1 of the submission process that the paper is for a special issue, and at Step 4 enter "LVM LONG" in the Special Issue Information field.

Submitted manuscripts should comply with the instructions for authors of *Biometrical Journal* that are reported in the homepage of the journal at the link "Author Guidelines".

General time-frame scheduling
Submission of manuscripts: February 28, 2016

Notification to authors after first reviewing: May 31, 2016 (tentative)
Submission of final papers for the Special Issue: December 2016 (tentative)