

**Wiener Biometrische Sektion
der Internationalen Biometrischen Gesellschaft
Region Österreich – Schweiz**

<http://www.meduniwien.ac.at/wbs/>

Einladung zum

BIOMETRISCHEN KOLLOQUIUM

am **Montag, 4. Mai 2015** um **14:00 Uhr** (s.t.)

im Jugendstilhösaal der Medizinischen Universität Wien,
Bauteil 88 – Ebene 3, Spitalgasse 23, 1090 Wien

Plan siehe <http://cemsis.meduniwien.ac.at/allgemeines/anschrift/>

Vortragender:

ARNE BATHKE

Universität Salzburg

**TRYING TO MAKE SENSE OF MULTIVARIATE DATA SAMPLES
USING DIFFERENT INFERENCEAL METHODS**

Wir freuen uns auf zahlreichen Besuch.

Franz König
Präsident

Stephan Lehr
Sekretär

TRYING TO MAKE SENSE OF MULTIVARIATE DATA SAMPLES USING DIFFERENT INFERENCE METHODS

ARNE BATHKE

Universität Salzburg

Abstract:

Different non- and semi-parametric inferential methods designed to make sense of multivariate data samples are presented. Application is demonstrated using the R package `npmv`. Unlike in classical MANOVA, multivariate normality is not required for the data. Different response variables may even be measured on different scales (binary, ordinal, quantitative) when a fully nonparametric model is used. In addition to permutation tests, F approximations, and bootstrap solutions to test the global hypothesis, we present a multiple testing procedure which identifies significant subsets of response variables and factor levels, while controlling the familywise error rate.