

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

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Einladung zum

Biometrischen Kolloquium

am Donnerstag, 15. Mai 2008, um 15:30 Uhr (pünktlich)

im Seminarraum (Ebene 3, Raum 88.03.513) der
Besonderen Einrichtung für Medizinische Statistik und Informatik
(MSI) der Medizinischen Universität Wien
Spitalgasse 23, 1090 Wien

Es spricht Herr Dr. Achim Zeileis (Wirtschaftsuniversität Wien) zum
Thema:

A Lego System for Conditional Inference

Wir ersuchen um zahlreichen Besuch.

Thomas Lang
Präsident

Georg Heinze
Sekretär

A Lego System for Conditional Inference

Torsten Hothorn, Kurt Hornik, Mark A. van de Wiel, Achim Zeileis

Conditioning on the observed data is an important and flexible design principle for statistical test procedures. Although generally applicable, permutation tests currently in use are limited to the treatment of special cases, such as contingency tables or K-sample problems. A new theoretical framework for permutation tests opens up the way to a unified and generalized view. We argue that the transfer of such a theory to practical data analysis has important implications in many applications and requires tools that enable the data analyst to compute on the theoretical concepts as closely as possible. We re-analyze four data sets by adapting the general conceptual framework to these challenging inference problems and utilizing the coin add-on package in the R system for statistical computing to show what one can gain from going beyond the "classical" test procedures.

The American Statistician, 60(3), 257-263, 2006.

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Preprint:

<http://statmath.wu-wien.ac.at/~zeileis/papers/Hothorn+Hornik+VanDeWiel-2006.pdf>