

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

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Einladung zum  
**Biometrischen Kolloquium**

am Montag, 22. Juni 2009, 11.00 Uhr

in der Informatikbibliothek (Ebene 3, Raum 88.03.806) der  
Besonderen Einrichtung für Medizinische Statistik und Informatik  
(MSI) der Medizinischen Universität Wien  
Spitalgasse 23, 1090 Wien

Vortragender:

**Leonhard Held** (University of Zurich, Switzerland):

**INLA in action:  
Bayesian inference without (MCMC) tears?**

Wir freuen uns auf zahlreichen Besuch.

Thomas Lang  
Präsident

Georg Heinze  
Sekretär

## **INLA in action: Bayesian inference without (MCMC) tears?**

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Integrated nested Laplace approximations (INLA) have been recently proposed for approximate Bayesian inference in latent Gaussian models (Rue, Martino and Chopin, 2009, JRSSB). The INLA approach is applicable to a wide range of commonly used statistical models, such as generalized linear mixed models, non- and semiparametric regression as well as spatial and spatio-temporal models.

In this talk I will first review the methodology and contrast it with more established inference approaches such as Markov chain Monte Carlo (MCMC), empirical Bayes and hierarchical likelihood. In the second part of the talk I will discuss applications to bivariate random-effects meta-analysis, spatio-temporal disease mapping and age-period-cohort modelling and prediction.

This is joint work with Michaela Paul, Andrea Riebler, Havard Rue and Birgit Schrödle.