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Leibniz
Universität
Hannover

Mathematische Stochastik NTH Kolloquium

Prof. Dr. Axel Munk
Georg-August-Universität Göttingen

Statistical Multiscale Analysis: From Biomembranes to Biomolecular Microscopy

In this talk we will discuss the concept of statistical multiscale analysis in order to obtain fully data driven reconstructions from a given regularisation method. To this end, the extreme value behavior of the residuals has to be studied. We discuss in detail several examples: This includes locally adaptive total variation penalization for statistical inverse problems and automatic stopping of iterative algorithms. Our work is illustrated by several applications from biophysics, e.g. from ion channel experiments of biomembranes and from nanoscale biophotonics.

**Freitag, 7.5.2010, 16:30 Uhr, Raum f 442
Hauptgebäude der Leibniz Universität**

Ab 16:00 Uhr werden im Raum f 448 Kaffee und Gebäck gereicht.

Es laden herzlich ein:

**Prof. Dr. L. Baringhaus
Prof. Dr. R. Grübel
Prof. Dr. J.-P. Kreiß
Prof. Dr. A. Lindner
Prof. Dr. S. Weber**