

# Kolloquium über Mathematische Statistik und Stochastische Prozesse

**Stéphane Girard**  
INRIA Grenoble Rhône-Alpes, France

**27.03.2014, 11:00 Uhr, H5**

## Three different approaches to frontier estimator

Abstract: This talk deals with the estimation of the support of a multidimensional sample. It is assumed that the support can be written as  $S=\{(x,y), 0<y<g(x)\}$  so that the problem reduces to the estimation of the frontier function  $g$ . The first frontier estimator is due to Geffroy (1964). It is based on the extreme values of the sample. I shall present three extensions to this approach: estimators based on smoothed extreme values, estimators based on linear programming methods and estimators based on high order moments.

This is joint work with A. Guillou (Université de Strasbourg, France), A. Iouditski (Université de Grenoble, France), L. Menneteau (Université de Montpellier, France), A. Nazin (Institute of Control Sciences, Moscow, Russia) and G. Stupfler (Université Aix-Marseille, France).

Stéphane Girard  
INRIA Grenoble Rhône-Alpes  
<http://mistis.inrialpes.fr/~girard>

Kontakt: Prof. Dr. Holger Drees, Universität Hamburg, [holger.drees@uni-hamburg.de](mailto:holger.drees@uni-hamburg.de)