Statistical Machine Learning Seminar

Hosted by Department of Mathematical Sciences

- Date: Tuesday, April 26, 2016
- Time: 12:00-1:00
- Room: WH-100E
- Speaker: Wolfgang Wefelmeyer (Universität zu Köln)
- Title: Density estimators in regression models with errors in covariates

Abstract

In regression models $Y=r(X)+\varepsilon$ with X and ε independent, the density of the response Y can be estimated by a convolution of (kernel) estimators for the densities of $r(X)$ and ε. The rate of this convolution estimator depends on the smoothness of the densities of X and ε and on the smoothness and local flatness of the regression function r. When we observe the covariates X with measurement errors, $Z=X+\eta$, we need deconvolution estimators for the densities of X and ε and for r. This is joint work with Anton Schick and Ursula U. Müller.