KATJA ICKSTADT (Technische Universität, Dortmund)

Title: Stochastic Processes for Bayesian Nonparametrics

Abstract: Bayesian Nonparametrics makes use of prior distributions with support over an infinite dimensional space (for example, the space of continuous probability densities on the real line). The general concept is applicable for various modelling tasks, such as regression or mixture modelling. Priors often used include stochastic processes like those belonging to the class of Ongaro and Cattaneo. This talk will exemplify such stochastic process priors for Bayesian nonparametric regression under shape constraints as well as for nonparametric mixture modelling of Bayesian networks.