

MICHIGAN STATE UNIVERSITY
Department of Statistics and Probability

COLLOQUIUM

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Nonparametric Regression with Errors in Partial Variables

Tuesday, December 3, 2013
10:20am – 11:10am
Refreshments 10:00am
C405 Wells Hall

Abstract

An estimation procedure is proposed for a nonparametric regression in which some covariates are measured with errors and some are not. The procedure combines the ordinary and the deconvolution kernel estimation techniques. It is shown that the local, global, uniform convergence rate over a class of joint distributions of the response and the covariates, as well as the optimal convergence rate and the asymptotic normality of the proposed estimator, depend on the tail behaviors of the characteristic functions of the measurement error distributions. Examples are given to show the potential applicability of the proposed methodology.

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