MICHIGAN STATE UNIVERSITY
Department of Statistics and Probability

COLLOQUIUM

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Measurement Error and Variable Selection

Tuesday, October 21, 2014
10:20 a.m. - 11:10 am
Refreshments 10:00 am
C405 Wells Hall

Abstract

The talk starts with a discussion of the relationships among LASSO estimation, ridge regression, and attenuation due to measurement error as motivation for, and introduction to, a new approach to variable selection in parametric and nonparametric regression and discriminant analysis. The approach transcends the boundaries of parametric/nonparametric modeling. It is first presented in the familiar context of linear regression where its relationship to the LASSO is described in detail. The latter part of the talk focuses on implementation of the approach to nonparametric modeling where sparse dependence on covariates is desired. Applications to two- and multi-category classification problems are discussed.

To request an interpreter or other accommodations for people with disabilities, please call the Department of Statistics and Probability at 517-355-9589.