Statistics Seminar

Department of Mathematical Sciences

DATE:	Thursday, March 23, 2017
TIME:	1.15p-2.15p
LOCATION:	WH 100E
SPEAKER:	Jiwei Zhao, State University of New York at Buffalo
TITLE:	Penalized pairwise pseudo likelihood for variable selection with nonignorable missing data

Abstract

The regularization approach for variable selection was well developed for a completely observed data set in the past two decades. In the presence of missing values, this approach needs to be tailored to different missing data mechanisms. In this talk, we focus on a flexible and generally applicable missing data mechanism, which contains both ignorable and nonignorable missing data mechanism assumptions. We show how the regularization approach for variable selection can be adapted to the situation under this missing data mechanism. The computational and theoretical properties for variable selection consistency are established. The proposed method is further illustrated by comprehensive simulation studies and real data analyses. This is a joint work with Yang Yang from the State University of New York at Buffalo and Yang Ning from Cornell University.