DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE
THE UNIVERSITY OF HONG KONG

Departmental Seminar

Professor Yanyuan MA

Department of Statistics
Eberly College of Science
The Pennsylvania State University
USA

will give a talk
entitled

ON ESTIMATION OF GENERAL INDEX MODEL FOR SURVIVAL DATA

Abstract

We propose a general index model for survival data, which generalizes many commonly used semiparametric survival models and belongs to the framework of dimension reduction. Using a combination of geometric approach in semiparametrics and martingale treatment in survival data analysis, we devise estimation procedures that are feasible and do not require covariate-independent censoring as assumed in many dimension reduction methods for censored survival data. We establish the root-n consistency and asymptotic normality of the proposed estimators and derive the most ecient estimator in this class for the general index model. Numerical experiments are carried out to demonstrate the empirical performance of the proposed estimators and an application to an AIDS data further illustrates the usefulness of the work.

on

Thursday, December 13, 2018

(Refreshments will be served from 10:45 a.m. <u>outside Room 301 Run Run Shaw Building</u>)

11:00 a.m. – 12:00 noon

at

Room 301, Run Run Shaw Building

<u>Visitors Please Note</u> that the University has limited parking space. If you are driving please call the Department at 3917 2466 for parking arrangement.

All interested are welcome