

DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE THE UNIVERSITY OF HONG KONG

50th Anniversary Seminar Series

Mr. WONG Kin Yau

Department of Biostatistics
Gillings School of Global Public Health
The University of North Carolina at Chapel Hill
USA

will give a talk entitled

EFFICIENT ESTIMATION FOR SEMIPARAMETRIC STRUCTURAL EQUATION MODELS WITH CENSORED DATA

Abstract

Structural equation modeling is commonly used to capture complex structures of relationships among multiple variables, both latent and observed. In this talk, I describe a general class of structural equation models with a semiparametric component for potentially censored survival times. I consider nonparametric maximum likelihood estimation and propose a combined Expectation-Maximization and Newton-Raphson algorithm for its computation. I discuss conditions for model identifiability and present results on the consistency, asymptotic normality, and semiparametric efficiency of the estimators. Finally, I demonstrate the satisfactory performance of the proposed methods through simulation studies and provide applications to a study from The Cancer Genome Atlas that involves a variety of genomic variables.

on

Friday, March 31, 2017

(Refreshments will be served from 11:15 a.m. outside Room 301 Run Run Shaw Building)

11:30 a.m. – 12:30 p.m.

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.