

For favour of posting

DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE
THE UNIVERSITY OF HONG KONG

Seminar

Professor Tony CAI

Department of Statistics
The Wharton School
University of Pennsylvania
U.S.A.

will give a talk

entitled

OPTIMAL ESTIMATION OF NONSMOOTH FUNCTIONALS

Abstract

In this talk I will present some recent work on optimal estimation of nonsmooth functionals. These problems exhibit some interesting features that are significantly different from those that occur in estimating conventional smooth functionals. This is a setting where standard techniques fail. I will mainly focus on the problem of estimating the L_1 norm of a high dimensional normal mean vector. An estimator is constructed using approximation theory and Hermite polynomials and is shown to be asymptotically sharp minimax. A general minimax lower bound technique that is based on testing two composite hypotheses will also be discussed in detail. The technique is potentially also useful for other related problems. This is a joint work with Mark Low.

on

Wednesday, January 7, 2015

(Refreshments will be served from 4:00 p.m. in Common Room, Room 204, Run Run Shaw Building)

4:30 p.m. – 5:30 p.m.

at

Room 301, Run Run Shaw Building

Visitors Please Note 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