

For favour of posting

DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE
THE UNIVERSITY OF HONG KONG

Seminar

Professor Tony CAI

Dorothy Silberberg Professor
and Professor of Statistics
Department of Statistics
The Wharton School
University of Pennsylvania
U.S.A.

will give a talk

entitled

ROBUST DETECTION AND RECOVERY OF STRUCTURED SIGNALS

Abstract

A large collection of statistical methods has been developed for estimation and detection of structured signals in the Gaussian and sub-Gaussian noise settings. In this talk, we present a general approach to robust recovery and detection of structured signals for a wide range of noise distributions. We illustrate the technique with nonparametric regression and detecting and identifying sparse short segments hidden in an ultra long linear sequence of data. A key step is the development of a quantile coupling theorem that is used to connect our problem with a more familiar Gaussian setting. An application to copy number variation (CNV) analysis based on next generation sequencing (NGS) data is also discussed.

on

Friday, June 19, 2015

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

11:00 a.m. – 12:00 noon

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