

DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE THE UNIVERSITY OF HONG KONG

50th Anniversary Seminar Series

Professor Guang CHENG

Department of Statistics Purdue University USA

> will give a talk entitled

ADAPTIVE LARGE-SCALE TESTING UNDER HETEROGENEITY SPARSITY

Abstract

Massive data often consists of a growing number of potentially heterogeneous sub-populations. The main aim of this talk is to develop a testing procedure to detect heterogeneity among a sequence of high dimensional linear models. In theory, we prove that our large-scale heterogeneity test procedure can consistently detect departure from null of a magnitude that no other tests could improve. Moreover, our test is adaptive to the sparsity level of the underlying heterogeneity structure. An intriguing phenomenon is revealed that, the more sub-populations are, the model with higher dimensionality can be detected, so-called blessing of massive data.

on

Thursday, June 1, 2017

(Refreshments will be served from 3:15 p.m. outside Room 301 Run Run Shaw Building)

3:30 p.m. – 4:30 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.