For favour of posting

DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE THE UNIVERSITY OF HONG KONG

<u>Seminar</u>

Professor J.S. MARRON

Amos Hawley Distinguished Professor
of Statistics and Operation Research
The University of North Caroline at Chapel Hill
and
Saw Swee Hock Professor of Statistics
National University of Singapore

will give a talk

entitled

HANDLING HETEROGENEITY IN BIG DATA

Abstract

A major challenge in the world of Big Data is heterogeneity. This often results from the aggregation of smaller data sets into larger ones. Such aggregation creates heterogeneity because different experimenters typically make different design choices. Even when attempts are made at common designs, environmental or operator effects still often create heterogeneity. Thus motivates moving away from the classical conceptual model of Gaussian distributed data, in the direction of Gaussian mixtures. But classical mixture estimation methods are usually useless in Big Data contexts, because there are far too many parameters to efficiently estimate. Thus there is a strong need for statistical procedures which are robust against mixture distributions without the need for explicit estimation. Some early ideas in this important new direction are discussed.

on

Wednesday, April 22, 2015

(Refreshments will be served from 2:15 p.m. outside Room 301 Run Run Shaw Building)

2:30 p.m. – 3:30 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.

All interested are welcome