

For favour of posting



DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE
THE UNIVERSITY OF HONG KONG

50th Anniversary Seminar Series

Professor Shige PENG

Shandong University and Chinese Academy of Sciences
China

will give a talk
entitled

**DATA-BASED NONLINEAR DISTRIBUTIONS UNDER
ROBUST EXPECTATIONS**

Abstract

A real world flux of data is usually modeled as a sequence of independent and identically distributed (i.i.d.) random variables, or by a linear (nonlinear) regression model driven by an i.i.d. sequence. However, this modeling is far from true in many real world situations. Uncertainty essentially hidden inside the real world data sequence should be taken into consideration. In this talk we introduce a robust nonlinear expectation and a simple algorithm of phi-max-mean to quantitatively measure and calculate this type of uncertainty. It is proved that the phi-max-mean is an asymptotically optimal unbiased estimator to the corresponding nonlinear distribution.

on

Wednesday, March 8, 2017

(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

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