

For favour of posting

DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE
THE UNIVERSITY OF HONG KONG

Departmental Seminar

Professor Kung-Sik CHAN

University of Iowa
USA

will give a talk
entitled

**REDUCED-RANK SPECTRAL CLASSIFICATION WITH
HIGH-DIMENSIONAL TIME-SERIES DATA**

Abstract

High-dimensional time-series data are increasingly collected for the purpose of classifying the underlying process into one of a few known processes. As the linear dynamical information of a stationary vector process can be succinctly summarized by its spectral density matrix, it is natural to adopt spectral classifiers, which is, however, infeasible with high-dimensional time-series data, because the spectral density matrix is of dimensions $p \times p$ where p is the time-series dimension. To overcome the aforementioned curse of dimensionality, we develop new reduced-rank spectral classifiers. The efficacy of the proposed methods will be demonstrated by both simulations and real applications. Some theoretical properties of the proposed approach will be discussed.

The talk is based on joint work with Fuli Zhang.

on

Friday, August 10, 2018

(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