For favour of posting

DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE
THE UNIVERSITY OF HONG KONG

Seminar

Professor Qiwei YAO

Department of Statistics
London School of Economics
U.K.

will give a talk

entitled

IDENTIFYING THE FINITE DIMENSIONALITY OF CURVE TIME SERIES

Abstract

The curve time series framework provides a convenient vehicle to accommodate some nonstationary features into a stationary setup. We propose a new method to identify the dimensionality of curve time series based on the dynamical dependence across different curves. The practical implementation of our method boils down to an eigenanalysis of a finite-dimensional matrix. Furthermore, the determination of the dimensionality is equivalent to the identification of the non-zero eigenvalues of the matrix, which we carry out in terms of some bootstrap tests. Asymptotic properties of the proposed method are investigated. In particular, our estimators for zero-eigenvalues enjoy the fast convergence rate n while the estimators for non-zero eigenvalues converge at the standard root-n rate. The proposed methodology is illustrated with both simulated and real data sets.

on

Wednesday, May 5, 2010

2:00 p.m. – 3:00 p.m.

at

Room 524, Meng Wah Complex
(behind the Chong Yuet Ming Amenities Centre)

Visitors Please Note that the University has limited parking space. If you are driving please call the Department at 2859 2466 for parking arrangement.

All interested are welcome