Joint Statistics Seminar

The Hong Kong University of Science and Technology

Time Series Smoothing and Change Point Detection

by

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Date: June 22, 2007 (Friday)
Time: 4:00 p.m. – 5:00 p.m.
Venue: Room 3401 (Lift 17 & 18)

Abstract

The first part of the talk summarises a few models for semiparametric smoothing of the mean and scale functions in financial time series. The focus is on the simultaneous modelling of different stochastic and deterministic components such as long memory, stochastic integration, GARCH effect and slowly changing scale function as well. The second part of the talk is based on an ongoing work, where the well known idea of the use of use of left and right hand side smoothers for detecting possible change points in the mean and scale functions is studied. It is shown that similar asymptotic properties as in nonparametric regression with iid errors hold under regular conditions. Some deep insights into the effect of change points on smoothing and further model building based on the residuals will also be given.

❖ ***All interested are welcome!*** ❖

For details, please contact ISMT Department.