THE CHINESE UNIVERSITY OF HONG KONG

Department of Statistics

will present a seminar entitled

Empirical Likelihood Estimation of Discretely Observed Diffusion

by

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Tokyo University of Science, Japan

on

Tuesday, 10 August 2010
2:00pm – 3:00pm

in

Lady Shaw Building C5
The Chinese University of Hong Kong

Abstract:

Empirical likelihood (EL) combined with estimating equations provides a modern semiparametric alternative to classical techniques like maximum likelihood estimation (MLE). In this paper, we study the empirical likelihood method to estimate discretely observed diffusion with various types of estimating equations. In many cases even the MLE method can not be performed, the EL method can do. We also construct the confidence regions for diffusion parameters. Some numerical simulations are performed to confirm the theoretical results. Applications for estimating short term interest rate models are also investigated.

All are Welcome