

For favour of posting

DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE  
THE UNIVERSITY OF HONG KONG

Seminar

**Professor George TAUCHEN**

**William Henry Glasson Professor of Economics**

Department of Economics  
Duke University  
U.S.A.

will give a talk

entitled

**LIMIT THEOREMS FOR POWER VARIATIONS OF PURE-JUMP  
PROCESSES WITH APPLICATION TO ACTIVITY ESTIMATION**

Abstract

This talk derives the asymptotic behavior of realized power variation of pure-jump Itô semimartingales as the sampling frequency within a fixed interval increases to infinity. We prove convergence in probability and an associated central limit theorem for the realized power variation as a function of its power. We apply the limit theorems to propose an efficient adaptive estimator for the activity of discretely-sampled Itô semimartingale over a fixed interval.

on

**Wednesday, November 17, 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