

For favour of posting

DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE  
THE UNIVERSITY OF HONG KONG

Seminar

**Professor Lajos Horváth**

Department of Mathematics  
University of Utah  
U.S.A.

will give a talk

entitled

## **STATISTICAL INFERENCE FROM PANEL DATA**

Abstract

We consider  $N$  panels with  $T$  observations in each panel. The panels are time series, the dependence between the panels is modeled by unobservable common factors. We provide a CUSUM type tests as well as estimators for the location of the change in the means of the panels. We obtain several limit theorems for the CUSUM tests under the no change null and the exactly one change alternative. We establish the asymptotics for difference between the true value of the time of change and its estimator. We illustrate the testing method with data on the Gini index (measure of inequality) and on the corruption index. We apply the limit results to construct confidence intervals for the time of change in the exchange rates of the currencies of 23 countries with respect to the US dollar and for the change in the GDP/capita in 113 countries.

on

**Wednesday, April 27, 2016**

*(Refreshments will be served from 2:15 p.m. outside Room 301 Run Run Shaw Building)*

**2:30 p.m. – 3:30 p.m.**

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