AMENDED



DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE THE UNIVERSITY OF HONG KONG

50th Anniversary Seminar Series

Professor Howell TONG

The University of Electronic Science and Technology of China, Chengdu, China and the London School of Economics, UK

will give a talk entitled

ON MODEL SELECTION FROM A FINITE FAMILY OF POSSIBLY MISSPECIFIED TIME SERIES MODELS

Abstract

Consider parametric time series models. 'I have *n* observations and *k* models, which model should I choose on the basis of the data alone?' is a frequently asked question in many practical situations. This poses the key problem of selecting a model from a collection of candidate models, none of which is necessarily the true data generating process, (DGP). Although existing literature on model selection is vast, there is a serious lacuna in that the above problem does not seem to have received much attention. In fact, existing model selection criteria have avoided addressing the above problem directly, either by assuming that the true DGP is included among the candidate models and aiming at choosing this DGP, or by assuming that the true DGP can be asymptotically approximated by an increasing sequence of candidate models and aiming at choosing the candidate having the best predictive capability in some asymptotic sense.

In this talk, I shall report result some joint work with Professors S-L Hsu and C-K Ing on a misspecification-resistant information criterion (MRIC) to address the key problem directly.

on

Wednesday, November 29, 2017

(Refreshments will be served from 2:15 p.m. <u>outside Room 301 Run Run Shaw Building</u>)
2:30 p.m. – 3:30 p.m.

at

Room 301, Run Run Shaw Building

<u>Visitors Please Note</u> that the University has limited parking space. If you are driving please call the Department at 3917 2466 for parking arrangement.