

DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE
THE UNIVERSITY OF HONG KONG

50th Anniversary Seminar Series

Professor Dietrich von ROSEN

Swedish University of Agricultural Sciences
Sweden

will give a talk
entitled

**TESTING BILINEAR HYPOTHESIS IN THE GROWTH
CURVE MODEL**

Abstract

Khatri (1966) was the first to present the maximum likelihood estimators for the growth curve model. Moreover, in Khatri's article from 1966, the likelihood ratio test for testing $H_0: \mathbf{FBG} = \mathbf{0}$ was presented, where \mathbf{B} consists of the unknown mean parameters, and \mathbf{F} and \mathbf{G} are known matrices. The likelihood ratio test turns out to have the same structure as it would have been performed in a MANOVA model, i.e. the ratio of two determinants of Wishart distributed matrices. This is unexpected because the MANOVA model belongs to the exponential family whereas the growth curve model belongs to the curved exponential family. We will show that the test in the growth curve model is a conditional test which explains the similarity with the MANOVA test.

on

Wednesday, December 27, 2017

(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.