

For favour of posting

DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE
THE UNIVERSITY OF HONG KONG

Seminar

Professor Peter HALL

*Department of Mathematics and Statistics
University of Melbourne
Australia*

will give a talk

entitled

NONLINEAR METHODS FOR VARIABLE SELECTION

Abstract

The conventional approach to variable selection, based on a linear model, can perform very effectively provided the response to relevant components is approximately monotone and its gradient changes only slowly. In other circumstances, nonlinearity of response can result in significant vector components being overlooked. Even if good results are obtained by linear model fitting, they can sometimes be bettered by using a nonlinear approach. These circumstances can arise in practice, with real data, and they motivate alternative methodologies. We suggest an approach based on ranking generalised empirical correlations between the response variable and components of the explanatory vector. This technique is not prediction-based, and can identify variables that are influential but not explicitly part of a linear predictive model.

on

Tuesday, December 23, 2008

11:00 a.m. – 12:00 noon

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