THE CHINESE UNIVERSITY OF HONG KONG

Department of Statistics

will present a seminar entitled

Partial Least Squares Regression and Its Problems

by

Professor Xizhi WU
Department of Statistics
Renmin University, Beijing, CHINA

on

Tuesday, 17 January 2006
2:00pm – 3:00pm

in

Lady Shaw Building C4
The Chinese University of Hong Kong

Abstract:

Among many statistical methods for linear models with the multicollinearity problem, partial least squares regression (PLSR) has become, in recent years, increasingly popular and, very often, the best choice. However, while dealing with certain predicting problems, we noticed that the results from PLSR appear unstable though it is still the best among some standard statistical methods. This unstable feature is likely due to the impact of the information contained in explanatory variables that is irrelevant to the response variable. Based on the algorithm of PLSR, we introduce a new method, modified partial least squares regression (MPLSR), to emphasize the impact of the relevant information of explanatory variables on the response variable. With the MPLSR method, satisfactory predicting results are obtained in the practical problem of automobile market.

All are Welcome