For Favour of Posting

THE CHINESE UNIVERSITY OF HONG KONG

Department of Statistics

will present a seminar entitled

Empirical States for Time Series Prediction

by

Professor G Tunnicliffe Wilson
Lancaster University

on

Friday, 16 January 2009
11:30am – 12:30pm

in

Lady Shaw Building C1
The Chinese University of Hong Kong

Abstract:

Can time series prediction be made more straightforward, avoiding the complexities of ARMA and VARMA models? It would seem that widespread practice, particularly for vector series, is simply to use VAR models, but these may be criticised as requiring a high order if a good representation is to be found. Using many practical examples, we will illustrate how autoregressive models can be extended by replacing the use of lagged values as predictors, by a set of states obtained by applying the generalised shift operator. This approach can be used for both discrete time models, and continuous time models for irregularly sampled data. It can also be successfully used in a non-linear prediction scheme and the application of all these models can be made almost automatic by use of the AIC. The selected order of the model is then frequently much lower than that of a simple AR, and the forecasting performance superior.

All are Welcome