

For favour of posting

DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE
THE UNIVERSITY OF HONG KONG

Seminar

Mr. Song SONG

Institute of Statistics
Humboldt University at Berlin
Germany

will give a talk

entitled

**PARTIAL LINEAR QUANTILE REGRESSION AND
BOOTSTRAP CONFIDENCE BANDS**

Abstract

In this talk uniform confidence bands are constructed for nonparametric quantile estimates of regression functions. The method is based on the bootstrap, where resampling is done from a suitably estimated empirical density function (edf) for residuals. It is known that the approximation error for the uniform confidence band by the asymptotic Gumbel distribution is logarithmically slow. It is proved that the bootstrap approximation provides a substantial improvement. The case of multidimensional and discrete regressor variables is dealt with using a partial linear model. Comparison to classic asymptotic uniform bands is presented through a simulation study. An economic application considers the labour market differential effect with respect to different education levels.

on

Friday, March 12, 2010

2:00 p.m. – 3:00 p.m.

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