

For favour of posting

DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE
THE UNIVERSITY OF HONG KONG

Seminar

Professor A.P. DAWID

Statistical Laboratory
Centre for Mathematical Sciences
University of Cambridge
UK

will give a talk

entitled

LOCAL PROPER SCORING RULES

Abstract

A scoring rule $S(x, Q)$ measures the quality of a quoted distribution Q for an uncertain quantity X in the light of the realised value x of X . It is *proper* when it encourages honesty, i.e, when, if your uncertainty about X is represented by a distribution P , the choice $Q = P$ minimises your expected loss. Traditionally, a scoring rule has been called *local* if it depends on Q only through $q(x)$, the density of Q at x . The only proper local scoring rule is then the log-score, $-\log q(x)$. For the continuous case, we can weaken the definition of locality to allow dependence on a finite number m of derivatives of q at x . A full characterisation is given of such local proper scoring rules. In particular, for $m > 0$ these can be computed without knowledge of the normalising constant of the density.

on

Monday, January 25, 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