UNIVERSITY OF SYDNEY

SCHOOL OF MATHEMATICS AND STATISTICS

Statistics Seminar

Friday, 16 May 2008, 2.00pm

Carslaw 375

A Characterisation of Scale Mixtures of the Uniform Distribution

Thomas Fung
(University of Sydney)

Abstract

Some common univariate heavy-tailed distributions used in financial modelling are obtained from scale mixing of the uniform distributions. All normal variance mixtures are of this kind. Once such representation is established, one can take advantage of it to obtain conveniently the ML estimates using Win-BUGS if we have a large sample. Despite their growing popularity, little has been done to characterise such distributions. In this talk, a characterisation that achieves this for multivariate spherical distribution will be provided, and illustrated by application to the multivariate Exponential Power distribution.

Enquiries about the Statistics Seminar should be directed to
Jean Yang (`jeany@maths.usyd.edu.au`)