



**The Hong Kong Polytechnic University
Department of Applied Mathematics**

**Seminar
on**

**Modelling with heavy-tailed distributions
in finance via scale mixtures**

by

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Abstract

In many statistical applications, modelling with non-normal symmetric distributions is always difficult to implement. This talk presents two classes of scale mixtures distributions which contain the normal, Student-t and exponential-power distributions as special cases. We shall demonstrate how to implement statistical models with these distributions without tear using Bayesian Gibbs sampler. Meanwhile, we shall also introduce the Generalized-t (GT) distribution and derive a new scale mixtures representation for its pdf. A stochastic volatility model is used for illustration.

Date : 23 January 2006 (Monday)
Time : 11:00 a.m. – 12:00 noon
**Venue : Departmental Conference Room HJ610
The Hong Kong Polytechnic University**

***** ALL ARE WELCOME *****