For favour of posting

DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE
THE UNIVERSITY OF HONG KONG

Seminar

Dr. Bernard WONG

Actuarial Studies, Australian School of Business
University of New South Wales
Australia

will give a talk

entitled

Modelling Dependence in Insurance Claims Processes with Lévy Copulas

Abstract

In this talk we investigate the potential of Lévy copulas as a tool for modelling dependence between compound Poisson processes and their applications in insurance. We analyse characteristics regarding the dependence in frequency and dependence in severity allowed by various Lévy copula models. Through the introduction of new Lévy copulas and comparison with the Clayton Lévy copula, we show that Lévy copulas allow for a great range of dependence structures. Procedures for analysing the fit of Lévy copula models are illustrated by fitting a number of Lévy copulas to a set of real data from Swiss workers compensation insurance. How to assess the fit of these models with respect to the dependence structure exhibited by the dataset is also discussed. Finally, we provide a decomposition of the trivariate compound Poisson process and discuss how trivariate Lévy copulas model dependence in this multivariate setting.

on

Wednesday, September 28, 2011

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