## DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE THE UNIVERSITY OF HONG KONG

Seminar for Confirmation of Candidature

## Mr. CHONG Wing Fung

Department of Statistics and Actuarial Science The University of Hong Kong

will give a talk

entitled

## CONVEX ORDERING FOR INSURANCE PREFERENCES

## Abstract

In this talk, we study two broad classes of convex order related optimal insurance decision problems, in which the objective function or the premium valuation is a general functional of the expectation, Value-at-Risk and Average Value-at-Risk of the loss variables. These two classes of problems include many existing and contemporary optimal insurance problems as interesting examples being prevalent in the literature. To solve these problems, we apply the Karlin-Novikoff-Stoyan-Taylor multiple-crossing conditions, which are useful sufficient criterion in the theory of convex ordering, to replace an arbitrary insurance indemnity by a more favorable one in convex order sense. The convex ordering established provides a unifying approach to solve the special cases of the problem classes. We show that the optimal indemnities for these problems in general take the double layer form.

on

Friday, June 19, 2015

2:30 p.m. - 3:30 p.m.

at

Room 301, Run Run Shaw Building

All interested are welcome