

DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE THE UNIVERSITY OF HONG KONG

50th Anniversary Seminar Series

Dr. Yasutaka SHIMIZU

Department of Applied Mathematics Waseda University Japan

> will give a talk entitled

A STATISTICAL ASPECT IN RISK MANAGEMENT FOR EQUITY-LINKED INSURANCE

Abstract

In both the past literature and industrial practice, it was often implicitly used without any justification that the classical strong law of large numbers applies to the modeling of equity-linked insurance. However, as all policyholders' benefits are linked to common equity indices or funds, the classical assumption of independent claims is clearly inappropriate for equity-linked insurance. In other words, the strong law of large numbers fails to apply in the classical sense. In this paper, we investigate this fundamental question regarding the validity of strong laws of large numbers for equity-linked insurance. As a result, extensions of classical laws of large numbers and central limit theorem are presented, which are shown to apply to a great variety of equity-linked insurance products. This is a joint work with Dr. R.Feng in University of Illinois at Urbana-Champaign.

on

Tuesday, March 28, 2017

(Refreshments will be served from 2:15 p.m. outside Room 301 Run Run Shaw Building)

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

at

Room 301, Run Run Shaw Building

<u>Visitors Please Note</u> that the University has limited parking space. If you are driving please call the Department at 3917 2466 for parking arrangement.