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DEPARTMENT OF STATISTICS AND ACTUARIAL SCIENCE THE UNIVERSITY OF HONG KONG

Confirmation Seminar

Ms. WANG Guanqing

Department of Statistics and Actuarial Science The University of Hong Kong

will give a talk

entitled

PRICING THE DYNAMIC FUND PROTECTION WITH JUMP-DIFFUSION

Abstract

In this talk, motivated by the Guaranteed Minimum Death Benefits in various deferred annuities, we investigate pricing a dynamic fund protection whose protection level is a stochastic level given by a stock. We assume that the stock price processes follow geometric Brownian motion with drift plus independent compound poisson process with negative jumps and the time-until-death random variable is exponentially distributed which is independent of the stock price processes. We use Esscher transform and discounted density functions as key tool to derive the value of this insurance product under the proposed model. We obtain the closed form formula for it when the jumps are exponentially distributed.

on

Thursday, February 13, 2014

10:00 a.m. – 11:00 a.m.

at

Room 524, Meng Wah Complex (behind the Chong Yuet Ming Amenities Centre)

<u>Visitors Please Note</u> 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