

1137-49-266

Huanqun Jiang* (jiangh@oregonstate.edu), Department of Mathematics, Kidder Hall, Oregon State university, Corvallis, OR 97331. *Optimal barrier strategies for heavy-tailed surplus and interest rates.*

This talk will focus on the optimal barrier strategy in the classical dividend distribution problem in insurance mathematics. The capital process is modelled as the spectrally negative Lévy process as usual. In particular, it will discuss the proof of the conditions for the optimality of barrier strategy, when the discounting factor is an exponential Lévy process. It suggests when the constant barrier strategy is the best one if both the capital process and the interest rate are allowed to evolve with Lévy jumps. (Received February 05, 2018)