

Yang, H. (2014). Exponential Stopping of Brownian Motion and Applications to Valuing Equity-linked Products, University of Lausanne, Switzerland, September, 2014.

Abstract:

In this talk, I shall present a new method on valuation of equity-linked products. For simplicity, I shall use a geometric Brownian motion model to model the underlying index dynamics, but the method of this presentation can be applied to other models, such as jump-diffusion model and discrete models. A substantial series of closed-form formulas is obtained, for the contingent call and put options, for lookback options, and for barrier options. (This talk is based on joint papers with Hans U. Gerber and Elias S.W. Shiu).