

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research
Department of Mathematics*

PROBABILITY AND INFORMATION THEORY SEMINAR

Stochastic Local Volatility model: from single asset to multi assets

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Abstract

Stochastic local volatility model (SLV) is a hybrid mixture of the local volatility model (LV) and the stochastic volatility model. SLV enjoys the perfect calibration to the market vanilla option prices as a local volatility model, and exhibits a smile dynamics that are more consistent with those observed from market as a stochastic volatility model. SLV has been well perceived among practitioners but draws less attention among academics. In this talk we start from a review of the theory and implementation of stochastic local volatility model on a single asset. We then introduce some recent results on SLV for a quanto asset as well as multi assets cases. Finally we shall mention a few questions related to SLV model are yet to be answered.

Date: April 7, 2014 (Monday)

Time: 11:00am – 12:00noon

Place: Room 206, Run Run Shaw Bldg., HKU

All are welcome