



PRACTITIONER WORKSHOP

Hilton Hotel, Sydney, 12-13 December 2011

The LIBOR Market Model and Beyond

By Professor Mark Joshi



In this two-day course, a leading international expert will examine the practical issues that arise when using the LIBOR market model to price exotic interest rate derivatives. The focus throughout will be on how to develop an implementation that achieves rapid pricing and sensitivity computation, and stably calibrating to the market whilst being able to cope with path-dependence, discontinuous pay-offs and early exercise features.

Day 1:

- Why market models and theoretical underpinnings.
- Achieving a speedy Monte Carlo implementation: drift computation, drift approximation, accelerating convergence
- Calibration: time homogeneity, stable simultaneous calibration to caplets and swaptions
- Introducing skew to the LMM.

Day 2:

- Pricing products with early exercise features, obtaining tight bounds.
- Greeks: adjoints and gammas.
- Greeks: discontinuous products and market Greeks.
- Kooderive: obtaining 100x speed ups using GPU technologies.

Mark Joshi obtained a B.A. in mathematics (top of year) from the University of Oxford in 1990, and a Ph.D. in pure mathematics from the Massachusetts Institute of Technology in 1994. He was an Assistant Lecturer in the department of pure mathematics and mathematical statistics at Cambridge University from 1994 to 1999. Following which he worked for the Royal Bank of Scotland from 1999 to 2005 as a quantitative analyst at a variety of levels, finishing as the Head of Quantitative Research for Group Risk Management. He joined Melbourne University in November 2005 and is a professor in the Centre for Actuarial Studies.

Mark's book "The Concepts and Practice of Mathematical Finance," CUP 2003 has become a standard introductory text in the area, and his other book "C++ Design Patterns and Derivatives Pricing," CUP 2004, has also proved popular. He has published twenty pure mathematics papers, as well as writing over fifty papers on financial mathematics, many of which deal with the practical aspects of implementing market models.

Who should attend?

Quantitative analysts, traders, risk managers, financial engineers, researchers, regulators and individuals interested in quantitative issues in risk management

Information

This workshop day at QMF 2011:
\$1,365.00 for 1 Day or
\$2,320.00 for 2 Days
(payment on/before 5 August 2011)
Early Bird
The registration fee also includes GST,
morning and afternoon teas, and lunch.

Date, Time & Venue
12-13 December 2010 / 9.00 am - 5.00pm
Hilton Hotel Sydney, 488 George Street,
Sydney NSW 2000
The number of participants are limited.
Please register soon to secure your
place.

Registration

Contact the Conference Coordinator to receive a registration form, or visit the QFRC website.

Contact Details

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