Date of the event:

On Thursday 3rd February 2011
From 01:00 PM to 2:00 PM

Location:

Luxembourg School of Finance
University of Luxembourg
4 Rue Albert Borschette
2nd Floor
Modigliani Miller Auditorium (E02-003)
L-1246 Luxembourg

Registrations:

- Free seminar (with lunch included)
- Registrations by email before February 1st, 2011
- At the following address : lsf-events@uni.lu

Information:

Ms Caroline Herfroy
Tel : +352 46 66 44 6335

http://www.lsf.lu/eng/Research/Seminars-and-Workshops

UNIVERSITÉ DU LUXEMBOURG

FACULTÉ DE DROIT, D'ÉCONOMIE ET DE FINANCE

LUXEMBOURG SCHOOL OF FINANCE

The LSF is pleased to invite you to the following lunch seminar:

Pricing Continuously Monitored Barrier Options on Discontinuously Traded Underlyings

By Professor Jos Van Bommel
Universidad Cardenal Herrara, Spain

UNIVERSITÉ DU LUXEMBOURG

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Is pleased to invite you to the

LSF Seminar

Pricing Continuously Monitored Barrier Options on Discontinuously Traded Underlyings

By Jos Van Bommel

Continuously monitored down-and-out calls and up-and-out puts have become very popular during the last decade, mainly because they can be interpreted as simple leveraged positions. Their deltas stay close to unity and their Greeks are small, particularly in low interest rate environments. However, due to discontinuous trading, barrier options are subject to *gap risk* which is not captured by incumbent pricing models. In this paper we present two Monte Carlo methods to value knockout barrier options if the underlying has periodic trading halts: an a*daptive step method*, and a *min-end simulation* of the intra jump minimum values, for which we derive the joint distribution. We find option premiums significantly higher than the Merton value and that are dependent on the time of day.

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