Seminar “Numerical Finance”

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Institute for Numerical Mathematics, University of Ulm
Summer term 2013

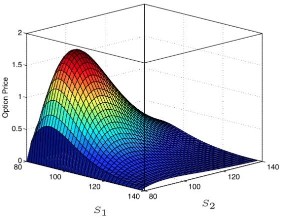

Figure: *Price of a barrier basket option in a Lévy copula model*. N. Reich, C. Schwab, C. Winter, *On Kolmogorov equations for anisotropic multivariate Lévy processes*. Finance Stoch. (2010).

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We discuss current research topics from numerical finance:

- Fourier methods,
- Monte Carlo methods,
- Sparse grid methods,
- Reduced basis methods,
- FE and FD methods,

for different type of models (including energy markets and Lévy models).

- Master students.
- Requirements: Numerical finance, financial mathematics.
- To register please send an email to: sebastian.kestler@uni-ulm.de
- Preliminary discussion: **29.01.2013, 13:00 in room 220 He 18**.

Criteria for successful conclusion:

- Independent studies of a current research topic in numerical finance.
- Written seminar work in LaTeX:
  - Mathematically precise description of the chosen topic in your own words.
  - 15 – 20 pages.
- Beamer presentation: about 40 minutes including discussion.

Seminar work can serve as basis for a master thesis.

Event mode: Depends on the number of participants.

A tentative list of topics and further information can be found here:

`http://www.uni-ulm.de/mawi/mawi-numerik/lehre/sommersemester-2013/seminar-numerical-finance.html`