



Einladung zum Oberseminar Wissenschaftliches Rechnen

Julius-Maximilians-Universität Würzburg
Lehrstuhl für Wissenschaftliches Rechnen IX

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Foundations of Option Pricing and Model Calibration with Empirical Option Prices

Arbitrage free pricing has to be done with respect to a so called equivalent martingale measure. Unlike in the case of complete markets, and the BS-market in particular, this measure is in general not unique if the underlying asset has a stochastic dynamic of Levy type, and thus can not be determined from the observation of the time series of the underlying. Therefore, market information on option prices that are listed publicly is used as a kind of inverse calibration strategy.

In the talk I review the concept of implicit volatilities and implicit distributions and discuss some problems that arise when working with empirical data. Also, the relation to control problems that involve Levy-type Fokker Planck equations of Partial Integral Differential Equations (PIDE) type is discussed.

Ort: Raum 30.02.003 (2. Stock) (Mathegeb. 30 West) Zeit: Freitag, 24.04.2015, 10.00 Uhr

Zu diesem Vortrag laden wir Sie herzlich ein.

gez. Prof. Dr. Alfio Borzi
gez. Prof. Dr. Roland Griesmaier