

Interdisziplinäres Statistik-Kolloquium (ISK) der Universitäten Marburg und Gießen

Im Rahmen des Interdisziplinären Statistik-Kolloquiums der Philipps-Universität Marburg und der Justus-Liebig-Universität Gießen wird

Prof. Eckhard Platen
(University of Technology Sydney)

am

Dienstag, den 29. Mai 2018

zum Thema

**“Dynamics of a Well-Diversified Equity Index and
Martingale Inference“**

vortragen.

Abstract: The paper derives an endogenous model for the long-term dynamics of a well-diversified equity index with rough volatility, the S&P500. It assumes that the index is a proxy of the respective growth optimal portfolio, the variance of its increments evolves in some market time proportionally to the index value and the derivative of market time is a linear function of the squared derivative of a smoothed proxy of the single driving Brownian motion. The resulting model is highly tractable, allows almost exact simulation and leads beyond classical finance theory. Its parameters are estimated via a novel martingale inference method, which employs higher-strong order, implicit approximations of the increments of the system of stochastic differential equations.

Der Vortrag findet um **18:15 Uhr** im Hörsaalgebäude, Biegenstraße 14, Raum: HS 00/0070, statt. Alle Interessenten sind herzlich eingeladen!

Prof. Dr. Hajo Holzmann
Prof. Dr. Markus Bibinger
Prof. Dr. Peter Winker
Prof. Dr. Ludger Overbeck