

Contact

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Organizing Committee

Prof. Dr. Stefan Weber

Der Workshop wird von der Deutschen
Aktuarvereinigung als Weiterbildungs-
veranstaltung anerkannt.



Workshop on Insurance and Financial Mathematics

Introduction to the Benchmark Approach:
Towards Less Expensive Production in Insurance

Thursday–Friday

14–15 June 2018

Introduction to the Benchmark Approach: Towards Less Expensive Production in Insurance

This workshop provides an introduction to the benchmark approach, a general framework for modelling insurance and financial markets. The benchmark approach allows for a unified treatment of portfolio optimization, liability valuation and hedging, derivative pricing, financial planning, insurance and risk management. It extends beyond the classical asset pricing theories – with important new insights and methodologies for portfolio optimization and the analysis and management of long-dated liabilities. A Law of the Minimal Price characterizes the least expensive valuation and production of products.

A Diversification Theorem enables a construction of extremely well performing

proxies for the growth optimal portfolio, the benchmark.

The rich framework of the benchmark approach leads to the construction of parsimonious, realistic long-term models under the real-world probability measure. The lectures will explain how the approach generalizes classical portfolio optimization, the risk-neutral and the actuarial approach. Case studies illustrate its application to the valuation and production of long-term insurance products and pension plans. These examples clearly demonstrate that a range of liabilities is in fact less expensive and may be produced at lower costs than is suggested by the classical theory that is currently used in practice.



Speaker

Professor Eckhard Platen holds the Chair in Quantitative Finance at the University of Technology Sydney. He is co-author of three books on numerical methods for stochastic differential equations, a fourth book on his innovative benchmark approach, and a fifth book on evaluation methods for the application of his approach. He has authored more than 190 papers in finance, insurance and mathematics and serves on the editorial boards of seven

international journals, including *Mathematical Finance* and *Quantitative Finance*, and a Bocconi-Springer book series. His main interests are in the extension and application of his benchmark approach, with focus on less expensive valuation and production of pension and insurance payouts and improved regulation.

The workshop is free and open to all interested participants. Please register for the workshop until 7 June 2018: weske@stochastik.uni-hannover.de



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Location

Talanx AG
Riethorst 2
30659 Hannover

Thursday 14 June 2018

10:00 – 10:05 Opening
10:05 – 11:20 Lecture 1
11:20 – 11:30 Break
11:30 – 12:45 Lecture 2
12:45 – 14:00 Lunch Break
14:00 – 15:15 Lecture 3
15:15 – 15:25 Break
15:25 – 16:40 Lecture 4
16:40 – 17:10 Coffee Break

17:10 – 18:25 Lecture 5
18:25 – 19:00 Champagne Reception

Friday 15 June 2018

09:40 – 09:45 Opening
09:45 – 11:00 Lecture 6
11:00 – 11:30 Coffee Break
11:30 – 12:45 Lecture 7
12:45 – 14:00 Lunch