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Winter Term 2017/2018

INSTITUTE OF MATHEMATICAL FINANCE Prof. Dr. Alexander Lindner Prof. Dr. Robert Stelzer Dirk Brandes

Analysis of Time Series in Continuous Time

- Lecturer: Alexander Lindner, Robert Stelzer, and Dirk Brandes
 - Type: Master (also possible Bachelor)
- Registration: To register for the seminar, please write an email to dirk.brandes@ uni-ulm.de until 31st July 2017. Please give your name, matriculation number, and your courses of studies and subjects you have taken in the area of Financial Mathematics, Probability Theory or Stochastic Processes. The number of participants is limited to 15 students.
- Organization: Weekly during winter term.
- First meeting: Assignment of topics: Wednesday, 2nd August 2017, 13.00 14.00, He18, 2.20.
- Prerequisites: Master students:
 - Required: Measure Theory, Elementary Probability and Statistics, Stochastik I
 - Helpful: Time Series Analysis
 - Master in Finance:
 - Required: Financial Mathematics I
 - Helpful: Financial Mathematics II
 - Contents: Foundation of Time Series Analysis Hilbert Space Theory Orthogonal Increment Processes Spectral Theory Mean Square Linear Prediction Functions of Finite Variation Lebesgue Stieltjes Integration ODE by Functions of Finite Variation Lévy Processes and Integration Theory w.r.t. Lévy Processes Multivariate Ornstein Uhlenbeck Processes CARMA Processes
 - Literature: BROCKWELL, P. J. & LINDNER, A. M. Analysis of Time Series with Continuous Parameter, Springer, to appear.
 - Details: http://uni-ulm.de/mawi/finmath/courses/winter-20172018/ seminar-continuous-time-series-analysis/