

# Announcement SoSe 2017 Lecture in Mathematical Finance

## Portfolio Analysis

Prof. Dr. Rudi Zagst

- Area / Modulnr.:** Mathematical Finance / MA4706
- Course Structure:** Lecture: 2h Exercises: 1h Programming Exercises: 1h
- Content:** Asset Classes, Mean Variance Theory, Portfolio Selection, Index Models, Arbitrage Pricing Theory, Capital Asset Pricing Model (CAPM), Alternative Risk Measures, Risk Adjusted Performance Measures, Risk Budgeting, Integration of Expert Forecasts, Reverse Optimization, Quantitative Fund Ranking
- Audience:** MSc Mathematical Finance and Actuarial Science
- Prerequisite:** recommended: MA3504 (Convex Analysis)
- Literature:** **E.J. Elton, M.J. Gruber, S.J. Brown, W.N. Goetzmann (2009):** Modern Portfolio Theory and Investment Analysis, John Wiley & Sons, New York  
**J.C. Hull (2014):** Risikomanagement – Banken, Versicherungen und andere Finanzinstitutionen, Pearson Deutschland, Halbergmoos  
**A. Meucci (2005):** Risk and Asset Allocation, Springer Finance, Berlin  
**T. Roncalli (2014):** Introduction to Risk Parity and Budgeting, Chapman & Hall, Boca Raton  
**M. Rubinstein (2006):** A History of the Theory of Investments, John Wiley & Sons, Hoboken  
**H. Uhlir, P. Steiner (2001):** Wertpapieranalyse, Physica-Verlag, Heidelberg  
**Interessante Internet Seite von W. Sharpe:** <http://www.stanford.edu/~wfs-harpe/mia/mia.htm>
- Certificate:** Exam, 6 CP
- Location and Time:** see TUMonline
- Exercises:** see TUMonline

