Lehrstuhl für Finanzmathematik
Fakultät für Mathematik
Technische Universität München

Announcement SoSe 2020
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/~wfsharpe/mia/mia.htm
Certificate:	Exam, 6 CP
Location and Time:	Room 2.02.01, Parkring 11, Garching-Hochbrück
Exercises:	see TUMonline