**Announcement SoSe 2015
Lecture in Mathematical Finance:**

Continuous Time Finance (FIM)

Prof. Dr. Rudi Zagst

Area: / Modulnr.:	FIM – Core course / MA9973
Course Structure:	Lecture: 2h Exercises: 1h Programming Exercises: Voluntary
Content:	Stochastic processes, Itô calculus, financial markets, arbitrage and completeness, pricing and hedging of contingent claims, Black-Scholes model and generalizations, pricing of exotic options, stochastic volatility and jump models, numerical methods; voluntarily: implementation of financial models (Monte Carlo simulation, Fourier pricing, etc.)
Audience:	MSc Finance & Information Management
Prerequisite:	MA9972 - Discrete Time Finance
MA4405 - Stochastic Analysis/Quantitative Methods in Finance (recommended)
Literature:	**N.H. Bingham und R. Kiesel (2004):** Risk-Neutral Valuation: Pricing and Hedging Financial Derivatives, Springer Finance
J. Hull, Prentice-Hall (2006): Options, Futures, and other Derivatives
M. Musiela und M. Rutkowski (2005): Martingale Methods in Financial Modelling Vol. 36, Springer
S.E. Shreve (2004): Stochastic Calculus for Finance II: Continuous-Time Models, Springer Finance
R. Zagst (2002): Interest Rate Management, Springer Finance
Certificate:	Written or oral examination, 4 CP
Time:	13.4., 16.4., 20.4., 27.4., 30.4., and 4.5.2015, 10 – 18:00
Location:	University of Augsburg, Building I, Room 1214