

Announcement SoSe 2021

Lecture in Mathematical Finance

Continuous Time Finance

PD Dr. Aleksey Min

Area / Modulnr.:	Mathematical Finance / MA3702
Course Structure:	Lecture: 2h Exercises: 1h Programming Exercises: 1h
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, numerical methods, implementation of financial models (Monte Carlo simulation, Fourier pricing, etc.)
Audience:	MSc Mathematical Finance and Actuarial Science
Prerequisite:	MA3701 (Discrete Time Finance), MA4405 (Stochastic Analysis)
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:	Exam, 6 CP
Location and Time:	see TUMonline
Exercises:	see TUMonline

