Forschungsgruppe Finanz- und Versicherungsmathematik
TUM School of Computation, Information and Technology
Technische Universität München

Announcement SoSe 2024
Lecture in Mathematical Finance

Continuous Time Finance (FIM)

Prof. Dr. Rudi Zagst

Area: / Modulnr.: FIM – Core course / MA9973

Course Structure: Lecture: 2h Exercises: 2h

Content: Stochastic processes, Itô calculus, financial markets in continuous time, no-arbitrage and completeness, pricing and hedging of contingent claims, Black-Scholes model and generalizations, pricing of exotic options, numerical methods and applications

Audience: MSc Finance & Information Management

Prerequisite: WI001287 – Basics of FIM,
MA9972 - Discrete Time Finance (recommended)

Literature:

Albrecher, Binder & Mayer (2009): Einführung in die Finanzmathematik, Birkhäuser
S.E. Shreve (2004): Stochastic Calculus for Finance II: Continuous-Time Models, Springer Finance
J.C Hull (2012): Options, Futures and other Derivative, Pearson
R. Zagst (2002): Interest Rate Management, Springer Finance
N.H. Bingham und R. Kiesel (2004): Risk-Neutral Valuation: Pricing and Hedging Financial Derivatives, Springer Finance
M. Musiela und M. Rutkowski (2005): Martingale Methods in Financial Modelling Vol. 36, Springer

Certificate: Written or oral examination, 6 CP

Location/Time: see TUMonline