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

Announcement WiSe 2024/25

Lecture in Mathematical Finance

Credit-Equity Modeling

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Area: / Modulnr.: Mathematical Finance / MA5430

Course Structure: Lecture: 2h Exercises: 1h

Content: Repetition of basic credit risk modeling and equity modeling, defaultable Markov diffusion processes, reduced-form credit-equity models, firm-value models.

Audience: MSc M, FAS, Data Science

Prerequisite: MA3408 (Financial Mathematics 2),
helpful: MA4405 (Stochastic Analysis), Probability Theory

Literature:
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
S.E. Shreve (2004): Stochastic Calculus for Finance II: Continuous-Time Models, Springer Finance
J.C. Hull (2006): Options, Futures, and Other Derivatives, Prentice-Hall
M. Musiela und M. Rutkowski (2005): Martingale Methods in Financial Modelling, Vol. 36, Springer

Certificate: Exam

Lecture/Exercises: see TUMonline