Zentrum Mathematik
Lehrstuhl für Finanzmathematik

Technische Universität München

Announcement WiSe 2016/2017
Lecture in Mathematical Finance:

Fixed Income Markets

Prof. Dr. Rudi Zagst

Area: / Modulnr.: Mathematical Finance / MA3703

Course Structure: Lecture: 2h Exercises: 1h

Content: Coupon Bonds, Forward Agreements on Coupon Bonds, Modeling of Fixed Income Markets, Pricing of Contigent Claims, Short-Rate Models, Health-Jarrow-Morton Framework, Multi-Factor Models, LIBOR Market Model, Interest-Rate Derivates (Futures, Swaps, Caps, Floors, Options), Management of Interest Rate Risk.

Audience: MSc Mathematics, Mathematical Finance and Actuarial Science

Prerequisite: MA3702 (Continuous Time Finance), MA4405 (Stochastic Analysis)

Literature:
R. Zagst (2002): Interest Rate Management, Springer Finance
D. Brigo and F. Mercurio (2006): Interest-Rate Models: Theory and Practice, Springer Finance
D. Filipovic (2009): Term-Structure Models, Springer Finance
J.C. Hull (2015): "Options, Futures and Other Derivatives", 9th Edition, Pearson Studium
M. Musiela and M. Rutkowski (2005): Martingale Methods in Financial Modelling, Vol. 36, Springer
P. Wilmott (2007): Introduces Quantitative Finance, 2nd Edition, John Wiley & Sons

Certificate: Exam, 5 CP

Location: Parkring 11/ Garching-Hochbrück

Lecture/Exercises: T.B.A.