

Announcement WiSe 2021/22

Lecture in Mathematical Finance

Fixed Income Markets

Prof. Dr. Blanka Horvath

- 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 Contingent Claims, Short-Rate Models, Heath-Jarrow-Morton Framework, Multi-Factor Models, LIBOR Market Model, Interest-Rate Derivates (Futures, Swaps, Caps, Floors, Options), Management of Interest Rate Risk, Multi-Curve Models.
- Audience:** MSc Mathematics, Mathematical Finance and Actuarial Science
- Prerequisite:** MA3702 (Continuous Time Finance)
- 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
L.B.G. Andersen, V.V. Piterbarg (2010): Interest Rate Modeling. Volume 1: Foundations and Vanilla Models
L.B.G. Andersen, V.V. Piterbarg (2010): Interest Rate Modeling. Volume 2: Term Structure Models
L.B.G. Andersen, V.V. Piterbarg (2010): Interest Rate Modeling. Volume 3: Products and Risk Management
J.C. Hull (2015): Options, Futures and Other Derivatives, 9th Edition, Pearson Studium
- Certificate:** Exam, 5 CP
- Location:** see TUMonline
- Lecture/Exercises:** see TUMonline