

Announcement SoSe 2018

Advanced Seminar

Investment strategies and multivariate rank correlation measures

Prof. Dr. Zagst, PD Dr. Min

Area/ Module ID: Mathematical Finance/ MA6015

Content: This seminar is based upon a list of recent papers on different areas of investment strategies and multivariate versions of rank correlation measures. Each participant presents one of the selected papers and discusses subsequent developments in the respective field. This provides a broad overview to all participants on the different fields, recent aspects, and historical development of the topics.

Continued next Semester: No

Audience: max. 9 master students

Prerequisite: Depending on the chosen topic: “Continuous Time Finance”, “Investment Strategies” or “Financial Engineering with Copulas”, “Quantitative Risk Management”.

Literature:

1. Pedersen, J.L., and Peskir, G. (2017). Optimal mean-variance portfolio selection. *Math. Financ. Econ.*, 137-160.
2. Björk, T., Khapko, M., and Murgoci, A. (2017). On time-inconsistent stochastic control in continuous time. *Finance Stoch.*, 331-360.
3. Chen, A., Mereu, C., and Stelzer, R. (2014). Optimal investment with time-varying stochastic endowments. Working Paper, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2458484
4. Chen, A., Mereu, C., and Stelzer, R. (2014). Target date funds: Marketing or Finance? Working Paper, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2579670
5. Derumigny, A., and Fermanian, J. D. (2017). About tests of the “simplifying” assumption for conditional copulas. *Dependence Modeling*, 5(1), 154-197.
6. Genest, C., Nešlehová, J., and Ben Ghorbal, N. (2011). Estimators based on Kendall's tau in multivariate copula models. *Australian & New Zealand Journal of Statistics*, 53(2), 157-177.
7. Leung, D., and Drton, M. (2016). Testing independence in high dimensions with sums of rank correlations. *arXiv:1501.01732v3 [math.ST]*
8. Schmid, F., and Schmidt, R. (2007). Nonparametric inference on multivariate versions of Blomqvist's beta and related measures of tail dependence. *Metrika*, 66(3), 323-354.
9. Gatheral, J. (2001). From local volatility to implied volatility. *Lecture Notes*. <http://janroman.dhis.org/finance/Volatility%20Models/> (this topic will be supervised by Dr. Katharina Kühn from Munich RE)

Certificate: 3 CP

Seminar information: Further information/ preliminary meeting
<https://www.mathfinance.ma.tum.de/en/teaching/summer-term-2018/>