

September 28th, 2018
KAP 414
3:30 P.M. – 4:30 P.M.

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“Moving Scalarizations for Time Consistency in
Dynamic Multivariate Problems in Finance”

Abstract: In this talk we will consider the time consistency problem for dynamic multivariate risk measures. Such risk measures arise in markets with transaction costs and, separately, when studying systemic risk. We will introduce the family of all market-consistent scalar multivariate risk measures. Duality of such risk measures will be presented. These results will be used to provide a recursive formulation of multivariate scalar risk measures. We relate this recursive formulation to a notion of a "moving scalarization", i.e. where the consistent risk-weights applied to the assets (in markets with transaction costs) or banks (in systemic risk) must change dynamically in time.