



复旦大学数学科学学院 数学综合报告会

报告题目: Forward Recursive Aggregator Systems and the Forward Epstein–Zin Recursive Paradigm

报告人: Anis Matoussi (Le Mans Université, France)

时间: 2026-10-16 星期五 9:00-10:00

地点: 光华东主楼 2001

报告摘要:

We introduce a new concept of forward recursive aggregator systems in Itô diffusion markets, bridging the theories of recursive utility and forward performance criteria. The resulting criteria are constructed forward in time and naturally accommodate arbitrary or rolling horizons. We derive the associated stochastic HJB equation and establish sufficient conditions for consistency and admissibility. We also develop a convex duality theory based on state-price densities and identify the density induced by the optimal wealth process. For homothetic aggregators, we characterize a class of forward Epstein–Zin recursive utility processes, derive the corresponding optimal investment and consumption policies, and obtain explicit solutions in the Black–Scholes and Heston models. This talk is based on joint work with Zakaria Bensaid (Risk and Insurance Institute, Le Mans University) and Thaleia Zariphopoulou (University of Texas at Austin and Oxford–Man Institute).

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