

November 25, 2013
KAP 414
2:00 PM – 3:00 PM

Prof. Marcel Nutz
(Columbia University)

“On Model Uncertainty in Discrete Time”

Abstract: We study the problems of arbitrage, superhedging and utility maximization in a nondominated model of a discrete-time financial market. We show that absence of arbitrage in a quasi-sure sense is equivalent to the existence of a suitable family of martingale measures, that a superhedging duality holds, and that optimal strategies for robust utility maximization exist. If time permits, some consequences for martingale theory will also be discussed. Based on joint works with Mathias Beiglöck and Bruno Bouchard.