

# BERNOULLIS TAFELRUNDE

GRADUATE STUDENT SEMINAR

**18 October 12:15-13:00**

Hybrid seminar

Seminar room 00.003, Spiegelgasse 1 / Zoom

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## Utility Maximization in a Market with an Arbitrage Opportunity

### ABSTRACT

One of the first assumptions that one makes in mathematical finance is the inference of the no-arbitrage condition. Arbitrage opportunities cannot exist in abstract financial markets. If they did, then it would be theoretically possible to obtain infinite wealth. In real world markets, arbitrage cannot be excluded, but there are other effects in place that hinder the accumulation of infinite wealth. In this talk, I will introduce two simple thought experiments that illustrate typical arguments that mathematicians use in mathematical finance.