Aims and Objectives
This is the first of a three-term sequence of courses required of all finance PhD students. This three-term sequence provides a thorough, doctoral-level grounding in the basic theoretical and empirical methods of finance. While the course is not designed primarily for MBAs and MiFs, a few participants each year may find that it provides an effective way to learn the rigorous foundations that underlie the finance taught on the Masters programmes. The course is especially relevant for those interested in investment banking or research in finance.

Topics covered
- State Prices and arbitrage
- Complete and incomplete security markets
- Arbitrage Pricing: theory
- Mean-variance analysis
- Factor pricing models: theory and empirics
- Multi-period security markets
- Consumption-based security pricing
- Dynamic programming and portfolio theory
- Asset pricing with asymmetric information
- Introduction to continuous-time methods

Pre-requisites
MBA and MiF participants wishing to take this seminar must get the prior approval of the lecturer. You should have a strong mathematical background and knowledge of (at least) undergraduate level macroeconomics, microeconomics, statistics and econometrics.

Assessment
Assessment will be by means of problem sets, midterm and a final exam.