



Summer term 2019 - Master Seminar: Quantitative Macroeconomics

Course Description:

In this seminar, students learn to use modern methods and tools of contemporaneous quantitative macroeconomic research. This includes the theoretical foundations of dynamic stochastic equilibrium models (DSGE) and their implementation in Matlab. To bring the model to the data, the students will also acquire an understanding on how to apply time series econometric methods to DSGE model evaluation.

Grading will be based on a seminar paper and its presentation, where students implement or replicate a DSGE model to conduct a quantitative macroeconomic research analysis. Students might choose papers from topics including international macroeconomics, labour economics, international finance, New Keynesian monetary models, macroeconomics of public finance, and more. The seminar will conclude with a short presentation (~20min) of the seminar paper. In order to introduce students to the tools and concepts required, we begin the seminar with four introductory block lectures.

Requirements:

The seminar builds on key economic concepts from Advanced Macroeconomics and Optimization in Economic Theory and it also makes use of concepts from Time Series Econometrics.

Registration:

Registration via the ILIAS course website (becoming member)

Lecturers:

Prof. Dr. Michael Evers,
michael.evers@uni-hohenheim.de

Markus Kontny, M.Sc.
markus.kontny@uni-hohenheim.de

Class Meetings and Deadlines:

At the Kick-off meeting we will discuss the schedule for the introductory lectures.

- 1) Kick-off Meeting: 02.04.2019, 15:00-16:00. Seminar room S 01
- 2) Lectures: (tentative) 09.04 /16.04 /23.04 /30.04, 15:00-18:00, Room (TBA)
- 3) Selection of seminar topic: 14.05, (time TBA)
- 4) Seminar paper presentations: TBA
- 5) Seminar paper due date: towards the end of the semester

Lecture Content:

09.04: Linear Autoregressive Systems and VARs

16.04: The Backbone of DSGE Models: The Real Business Cycle Model

23.04: Estimating Linear Models with Unobserved State Variables: The Kalman Filter

30.04: DYNARE and Identification in Quantitative Macroeconomics

If time allows: Short Introduction into Bayesian Estimation

Evaluation:

50% seminar paper, 30% presentation, 20% participation

Further information can be found on ILIAS once the term has started.