

Numerical Methods in Macroeconomics

October 22-23, 2024, Goethe University Frankfurt, Campus Westend, Casino

Tuesday, October 22

12:45-13:00	Opening Remarks (Casino 1.801)
13:00-14:00	Parallel Session
	Casino 1.801
	Abeer Reza Bank of Canada <i>Finite-Sample Identification-Robust Inference for Non-Linear DSGE Models</i>
	Yucheng Yang University of Zurich and SFI <i>Deep Learning for Search and Matching Models</i>
	Casino 1.802
	Gregor Boehl University of Bonn <i>HANK on Speed: Robust Nonlinear Solutions using Automatic Differentiation</i>
	Chris Naubert Bank of Canada <i>Differentiable, Filter Free Bayesian Estimation of DSGE Models Using Mixture Density Networks</i>
14:00-14:15	Break
14:15-15:15	Plenary Session (Casino 1.801)
	Harald Uhlig University of Chicago <i>Solving Dynamic Heterogeneous Agent Models: Taking Stock</i>
15:15-15:45	Break
15:45-16:45	Plenary Session (Casino 1.801)
	Thorsten Drautzburg Federal Reserve Bank of Philadelphia <i>Filtering with Limited Information</i>
16:45-17:45	Plenary Session (Casino 1.801)
	Kenneth Judd Hoover Institution, Stanford University <i>Optimal Dynamic Stochastic Fiscal Policy with Endogenous Debt Limits</i>

Wednesday, October 23

09:00-10:00	Plenary Session (Casino 1.801) Michael Reiter , Institute for Advanced Studies, Vienna <i>State Reduction and Second-order Perturbations of Heterogeneous Agent Models</i>						
10:00-10:15	Break						
10:15-11:15	Parallel Session						
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11:15-11:30	Break						
11:30-12:30	Plenary Session (Casino 1.801) Serguei Maliar Hoover Institution, Stanford University & Santa Clara University <i>AI Methods and Heterogenous Agent Models</i>						
12:30-13:30	Plenary Session (Casino 1.801) Marco Ratto Joint Research Centre, European Commission <i>Efficient and Robust Inference of Models With Occasionally Binding Constraints</i>						
13:30-13:45	Closing Remarks (Casino 1.801)						

This two half-day workshop will bring together researchers involved in the development and application of numerical methods in macroeconomics. Topics include solution methods, estimation methods, and machine learning applications for DSGE and other structural macroeconomic/-metric models, from linear representative agent to nonlinear and heterogeneous agent models, frequentist and Bayesian.

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Organization

Alexander Meyer-Gohde (Goethe-University Frankfurt and IMFS)
Falko Fecht and Martin Kliem (Bundesbank)
Jakob Liermann (IMFS)