

## Ph.D. Program Seminar:

### International Trade in Macro-Financial Modelling

#### Syllabus

**Description:** The purpose of this seminar is to give advanced doctoral students a hands-on introduction to frontier research in structural macroeconomic analysis in the areas of macro-financial modelling and international trade. The students should be able to replicate an existing structural model, present the research objective and the model of a paper, and get an overview of literature in these research areas. The seminar will consist of a combination of lectures, supervision of modeling projects, student presentations, and group discussions with extensive feedback. Each project, which should ideally be pursued by a team of two students, will involve studying an existing macroeconomic model from the literature. Students will then be guided in the development of a software implementation of the model in DYNARE with a policy application. At the end of the seminar, students should be able to start working on a dissertation project that involves structural macroeconomic modeling. Successful participation in this seminar is a pre-condition for the supervision of a dissertation by Prof. Wieland. Prof. Wieland will be available as first or second reader of the dissertation for all students who have passed the 2<sup>nd</sup> year course on “Monetary and Fiscal Policy: Theory and Practice” and this seminar.

**Time and Location:** Lectures will be held in person. The introductory meeting will take place on Wednesday, 23<sup>rd</sup> of April, 10:00 am in HoF 3.68 Toronto. Presentations will be held in person in the House of Finance.

**Registration:** To register for the seminar, students should send an e-mail to Jan Herrmann (herrmann[at]imfs-frankfurt[dot]de) and Maximilian Vilt (vilt[at]imfs-frankfurt[dot]de). Please include your matriculation number, student status (Ph.D. or MSQE), year of study, and full name. Registration should take place as soon as possible. You also need to register with the GSEFM Office of Academic Records. The maximum number of students participating in the seminar for credit will need to be restricted to twelve. In case of more registrations, the first twelve students who sent their contacts can take the seminar for credit.

**Requirements:** Students will be expected to give two short presentations for group feedback. The first presentation will discuss the assigned paper from the literature and modeling project. It will take place in the middle of the semester. The second presentation will report on the implemented model and policy application. Afterwards, the students should write a report on the model implementation and the policy application. Grading for the seminar course will be based on the two presentations (30 % each) and model implementation report (40 %).

## Literature:

### Model comparison:

Binder, M., Lieberknecht, P., Quintana, J. and Wieland, V., 2019. *Model uncertainty in macroeconomics: On the implications of financial frictions*. In David G. Mayes, Pierre L. Siklos, and Jan-Egbert Sturm (eds.), *The Oxford Handbook of the Economics of Central Banking*, Oxford: Oxford University Press 2019.

Schmidt, S. and Wieland, V., 2013. The New Keynesian approach to Dynamic General Equilibrium modeling: Models, methods and macroeconomic policy evaluation. In *Handbook of Computable General Equilibrium Modeling* (Vol. 1, pp. 1439-1512). Elsevier.

Wieland, V., Afanasyeva, E., Kuete, M. and Yoo, J., 2016. *New methods for macro-financial model comparison and policy analysis*. In *Handbook of Macroeconomics* (Vol. 2, pp. 1241-1319). Elsevier.

Wieland, V. and Wolters, M., 2013. *Forecasting and policy making*. In *Handbook of economic forecasting* (Vol. 2, pp. 239-325). Elsevier.

### List of projects papers:

Topic: Trade disruptions

Paper: Trade wars and the optimal design of monetary rules (Auray et al., 2025)

Source: [[Trade wars and the optimal design of monetary rules](#)]

Topic: Tariffs and Optimal Monetary Policy

Paper: The Optimal Monetary Policy Response to Tariffs (Bianchi and Coulibaly, 2025)

Source: [[The Optimal Monetary Policy Response to Tariffs](#)]

Topic: Macroeconomic effects of tariffs

Paper: Macroeconomic effects of tariffs shocks: The role of the effective lower bound and the labour market (Jacquinot et al., 2022)

Source: [[Macroeconomic effects of tariffs shocks: The role of the effective lower bound and the labour market - ScienceDirect](#)]

Topic: Exchange rate exposure

Paper: Foreign currency exposure and the financial channel of exchange rates (Longaric, 2022)

Source: [[Foreign currency exposure and the financial channel of exchange rates](#)]

Topic: Foreign trade shocks

Paper: Domestic versus foreign drivers of trade (im)balances: How robust is evidence from estimated DSGE models? (Cardani et al., 2022)

Source: [[Domestic versus foreign drivers of trade \(im\)balances: How robust is evidence from estimated DSGE models?](#)]

Topic: Short-term economic impact of tariffs

Paper: The Macroeconomics of Tariff Shocks (Auclert et al., 2025)

Source: [[tariff\\_shocks.pdf](#)]

[Topic: Trade disruptions in the EU]

Paper: Euro Area Risks Amid US Protectionism (Bottanzi et al., 2025)

Source: [[Euro Area Risks Amid US Protectionism](#)]