*Beyond The Optimising Agent*

Summer School in Advanced Methods for Economics and Political Economy

University of Greenwich, London, 5 – 9 June 2023

This summer school provides advanced training in methods for Economics and Political Economy with practical applications. It focusses on theoretical and empirical methods beyond constrained optimisation that capture features such as uncertainty, instability, complexity, institutions, and historical change. In this way, the school provides methods that receive less attention in standard economics programmes but are essential to analyse real-world issues such as financial cycles, climate change, income and wealth inequality, and much more.

**What will be covered?**

The school covers both analytical foundations in the form of lectures as well as applications in the form of hands-on computer-lab exercises and interactive group work. A variety of different methods are introduced, both quantitative and qualitative (see programme below). Concrete applications illustrate how participants can apply these methods in their own research.

**Who can participate?**

The summer school is targeted at PhD students (or PGRs) and Early Career Researchers (up to 3 years since completion of PhD). In exceptional cases, we will also consider applications from postgraduate students.

**Organising Team and Support**

The summer school is jointly organised by the Institute of Political Economy, Governance, Finance and Accountability (PEGFA) at the University of Greenwich and the Department of Economics at the University of Leeds. We are grateful for financial support from the Young Scholar Initiative (YSI) at the Institute for New Economic Thinking (INET).

- Coordinator Greenwich: Rafael Wildauer (r.wildauer@gre.ac.uk)
- Coordinator Leeds: Karsten Kohler (k.kohler@leeds.ac.uk)

## Programme

| | 09:00 – 13:00 (Lecture + lab session) | 14:00 – 18:00 (Lecture + lab session) |
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| **Mon, 5 June** | (1) *Structural Macroeconomic Models*<br><br>Rafael Wildauer (Greenwich)<br><br>Structural models of demand, distribution and conflict inflation. Introduction to using software for numerical solutions and simulations.<br><br>Software: R | (2) *Dynamic Models*<br><br>Karsten Kohler (Leeds)<br><br>Systems of difference equations, eigenvalues and eigenvectors, stability vs instability, cycles, balanced growth, saddle points.<br><br>Software: R |
| **Tues, 6 June** | (3) *Stock-flow Consistent Modelling and its Ecological Applications*<br><br>Maria Nikolaidi (Greenwich)<br><br>Macroeconomic modelling, climate change, steady-state analysis, calibration.<br><br>Software: R | (4) *Input-Output Analysis. An Overview of the Framework and Model Extensions*<br><br>Alessandra Celani (Paris, OECD)<br><br>Technical coefficient matrices, multipliers, inter-country input-output tables, global value chain participation indicators, environmentally extended input–output models, structural decomposition analysis.<br><br>Software: R |
| **Wed, 7 June** | (5) *Agent-based Models*<br><br>Severin Reissl (Milan, EIEE)<br><br>Foundational issues, model design and analysis, calibration/estimation, applications to financial markets, environment and macroeconomics.<br><br>Software: R | (6) *Macroeconometrics*<br><br>Karsten Kohler (Leeds) &<br>Rafael Wildauer (Greenwich)<br><br>Modelling macroeconomic time series, auto-regressive distributed lag models, vector auto-regressive models, local projections, identification.<br><br>Software: Stata |
| **Thurs, 8 June** | (7) *Panel Data Methods. Difference-in-Difference Estimation and Extensions*<br><br>Leila Gautham (Leeds)<br><br>Two-way fixed effects, event studies, synthetic control methods, and shift-share research designs.<br><br>Software: Stata | (8) *Case Studies and Causal Inference*<br><br>Jennifer Churchill (UWE Bristol)<br><br>When to do case studies, what to hope for from case studies, systematising case study analysis: methods of process tracing and qualitative comparative analysis. |
| **Fri, 9 June** | (9) *Conducting Interviews in Economic Research*<br><br>Annina Kaltenbrunner (Leeds)<br><br>The rationale for interviews in economic research; the conduct and analysis of interviews (e.g. sampling, avoiding bias, coding, making sense of interview material).<br><br>Software: Nvivo | (10) *Taking stock: Where Do We Go From Here?*<br><br>Annina Kaltenbrunner (Leeds),<br>Karsten Kohler (Leeds) &<br>Rafael Wildauer (Greenwich) |

**How to apply**

Send a CV and a 1-page motivation letter (covering, e.g., research interests / PhD topic, supervisors if applicable, methods used, and how you would benefit from attending) to beyondoptimization@gmail.com. We will notify successful candidates by 12 April 2023.

**Costs**

- Participation fee with accommodation (5 nights, Avery Hill Campus): **GBP 150**
- Participation fee without accommodation: **GBP 80**
- Lunch and coffee will be provided.

Tickets with accommodation include a room in the student accommodation at Avery Hill Campus, including breakfast. Each room includes a single bed, desk and a sink. Toilets and showers are separate but shared between 5 rooms which also share a communal kitchen. Avery Hill campus is a 40min bus ride away from Greenwich Campus, where all sessions will take place. See details about Avery Hill Campus here.

**Deadlines**

- Application deadline: 5 April
- Acceptance notification: 12 April
- Registration and payment: 30 April