2025 Africa Training Workshop in Macro-econometrics (AFTW-2025)

***Title*: *Time Series Modeling with applications in Macroeconomics*.**

(Fully remote)

This workshop has two parts that will take place on Nov. 5 - 7, 2025 and Nov. 12 - 14, 2025, resp.

Minicourse 1 (November 5 – 7, 2025)

Title: ***The identification of structural shocks in VAR models***

Instructors: Kenza Benhima (Univ. of Lausanne, Faculty of Business and Economics, HEC)
Jean-Paul Renne (Univ. of Lausanne, Faculty of Business and Economics, HEC)

Minicourse 2 (November 12 – 14, 2025)

Title: ***Local Projections***

Instructors: Òscar Jordà (UC Davis and SF Fed)
Mikkel Plagborg-Moller (Princeton University)

Organizers: Prosper Dovonon (Concordia University) and Ismael Mourifie (Wash U. St. Louis)

Important dates :

Deadline for application: September 30, 2025
Admission decision: October 10, 2025
Registration deadline: October 21, 2025
Registration fees: 200 USD

Overview:

The identification and estimation of dynamic responses to structural shocks are central goals of macro-econometrics. These responses represent the effects, over time, of an exogenous shock that propagates throughout the economy, as modeled by a system of simultaneous equations.

Over the past decades, various methodologies have been developed to estimate these responses. The aim of this course is to provide a comprehensive overview of those methods based on vector autoregressive (VAR) models and local projections and to equip students with practical tools to apply them in different contexts.

Minicourse 1 will provide a comprehensive overview of those methods based on vector autoregressive (VAR) models. The course is illustrated with examples using R software. Students will be able to replicate and experiment with these examples throughout the course. They are encouraged to install R (along with RStudio) before the course begins.

Minicourse 2 will cover theoretical and practical aspects of local projection estimation in empirical macroeconomics. Lectures will mainly emphasize Stata code, with some use of Python.

This is a graduate-level course for PhD students, scholars, and professionals (with at least a master's degree).

Applicants must be members of the Econometric Society at the time of application.
To join the Econometric Society, please go to https://www.econometricsociety.org/membership/join-renew or https://www.africaeconometricsociety.com/econometric-society-membership. Special rates apply to students

and scholars currently based in low- and low-middle income countries, and Africa-based applicants may apply for sponsored membership (for more information click here.)

Applications shall be submitted through Oxford Abstracts:
https://app.oxfordabstracts.com/stages/79307/submitter

The admission decision will be notified individually.

Information about scholarships and registration will be made available on the homepage of the Africa Training Workshop at https://www.africaeconometricsociety.com/aftw-2025.

For more information, email Prosper Dovonon at prosper.dovonon@concordia.ca

Topics and Schedule:

Minicourse 1

Topics

- Basics of multivariate time-series modelling
  (Introduction to vector autoregressive (VAR) models - Estimation of VAR models - Concepts of Impulse Response Functions (IRFs))
- Standard identification techniques
  (The identification issue - Zero restrictions (short-run and long-run))
- Alternative methods
  (Forecast error variance maximization - Sign restrictions - Combining sign and zero restrictions)
- Inference
  (Monte Carlo methods - Bootstrap methods)

Schedule

On each day (November 5 to 7), there will be **two sessions per day**:

- The first from 4:00 am to 6:00 am (EST) - 9:00 to 11:00 (GMT)
- The second from 8:00 am to 10:00 am (EST) - 13:00 to 15:00 (GMT)
  (EST: Canada/USA Eastern Time)

Minicourse 2

Topics

Session 1: Introduction to local projection estimation, Stata commands, nonlinear models
Sessions 2 & 3: Implementation of various identification approaches, inference, variance decompositions, comparison with SVARs
Session 4: Bootstrap, shrinkage/penalization, simultaneous confidence bands
Session 5: Panel data, differences in differences

Schedule

	Wednesday, Nov 12	Thursday, Nov 13	Friday, Nov 14
9:00 am - 11.00 am (EST) **14:00 - 16:00 (GMT)**		Session 2 (Plagborg-Moller)	Session 4 (Plagborg-Moller)
12:00 pm – 2:00 pm (EST) **17:00 - 19:00 (GMT)**	Session 1 (Jordà)	Session 3 (Plagborg-Moller)	Session 5 (Jordà)