An aerial photograph of a city, likely Evanston, Illinois, is shown on the left side of the cover. The image is overlaid with a semi-transparent red and blue graphic that resembles a stylized map or a geographical boundary. The red area covers the land, and the blue area covers the water. The text is positioned on the right side of the cover, set against a dark blue background.

Advanced Workshop For Central Bankers

September 3-10, 2019

Northwestern University
Evanston, IL

Andrew Atkeson
Lawrence Christiano
Martin Eichenbaum
Thomas Philippon
Giorgio Primiceri
Valerie Ramey
Sergio Rebelo
Ricardo Reis
Matthew Rognlie



CENTER FOR
INTERNATIONAL
MACROECONOMICS
NORTHWESTERN UNIVERSITY



Advanced Workshop For Central Bankers

This week-long workshop for central bank economists has two objectives. First, to expose participants to frontier models and techniques in monetary economics. Second, to foster discussion and exchange of ideas about applied monetary policy problems faced by different central banks.

The week is organized around lectures and computer-based assignments.

The workshop has been held annually since 2004. It has been attended, so far, by roughly 600 participants from 43 central bank institutions.

Participating Institutions

Central Banks:

Armenia, Australia, Austria, Bangladesh, Brazil, Belgium, Canada, Colombia, Costa Rica, Denmark, Finland, France, Germany, Greece, Hong Kong, Iceland, India, Italy, Israel, Japan, Korea, Malaysia, Mexico, Netherlands, Norway, Philippines, Poland, Russia, Slovakia, Spain, South Africa, Sweden, Switzerland and Uruguay.

Federal Reserve Banks:

Atlanta, Boston, Cleveland, and Dallas, European Central Bank, the Bank of International Settlements, the Inter- American Development Bank, and the International Monetary Fund.



CENTER FOR
INTERNATIONAL
MACROECONOMICS
NORTHWESTERN UNIVERSITY

Advanced Workshop For Central Bankers

Course lectures

The workshop includes eight three-hour course lectures on the following topics.

Empirical methods in monetary economics,
Martin Eichenbaum

Alternative techniques to estimate and empirically evaluate models of the monetary transmission mechanism: (i) structural VARs identified with short run restrictions, long run restrictions, and sign restrictions; (ii) fitting dynamic models to impulse response functions; (iii) maximum likelihood methods.

Specification, estimation, and analysis of monetary models,
Lawrence Christiano

Structural monetary models: the role of different frictions, such as sticky wages, sticky prices, working capital, and credit market imperfections. The use of Bayesian and other methods to estimate models and a review of recent developments in the use of models in the monetary policy process.

Open-economy models,
Sergio Rebelo

Understanding movements in the real exchange rate and the failure of uncovered interest parity. Designing open-economy models consistent with the key facts about nominal and real exchange rates.

Hank models
Matthew Rognlie

A discussion of Heterogeneous Agent New Keynesian Models that incorporate uninsurable idiosyncratic income risk and assets with different degrees of liquid.

Macroeconomic forecasting with big data
Girogio Primiceri

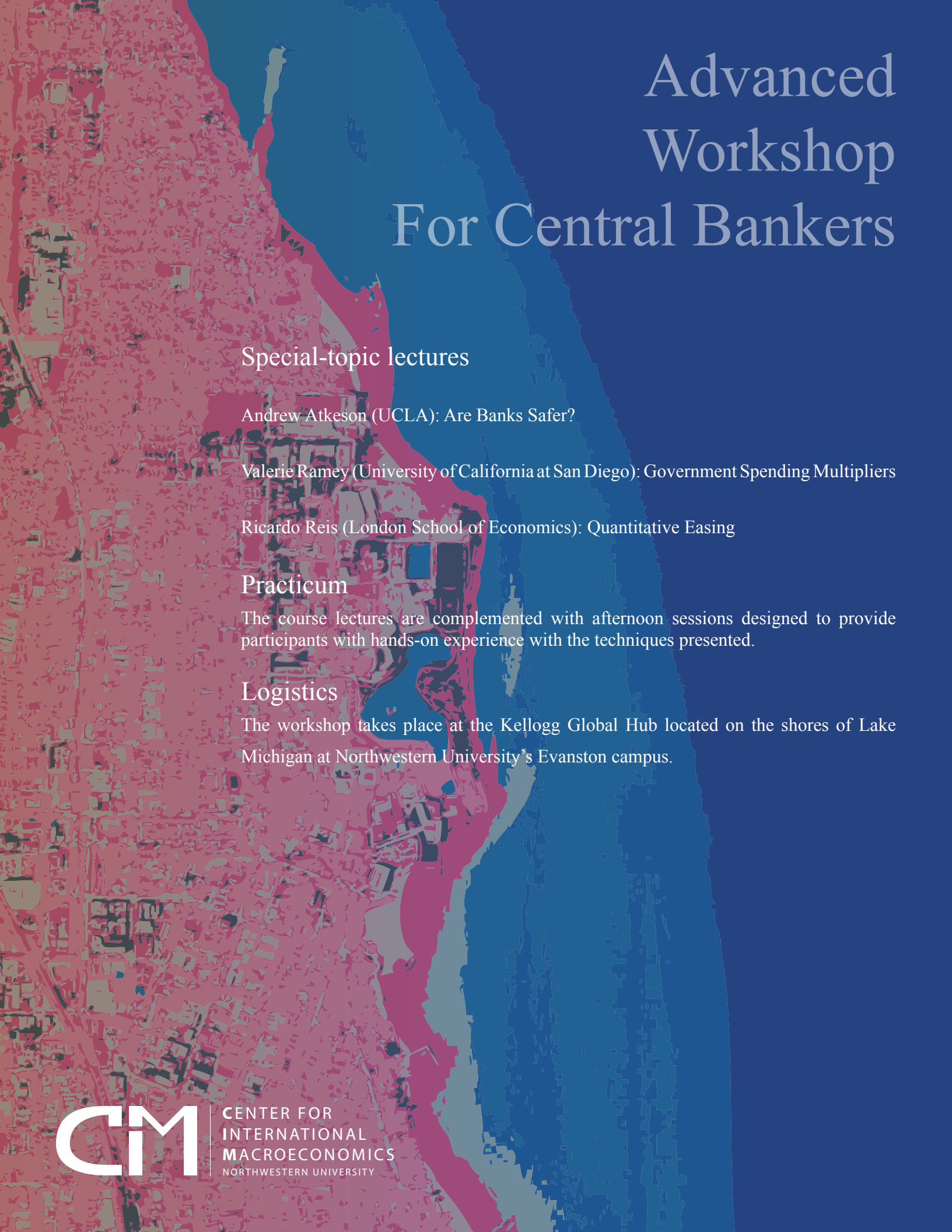
A comprehensive review of forecasting methods. Topics include VARs, dynamic factor models, robust Bayes inference, nowcasting, and long-run forecast uncertainty.

Macro-prudential regulation,
Thomas Philippon

An introduction to the principles underlying macroprudential regulation and an analysis of how macroprudential considerations alter the use of regulatory tools and the design of financial regulation.



CENTER FOR
INTERNATIONAL
MACROECONOMICS
NORTHWESTERN UNIVERSITY



Advanced Workshop For Central Bankers

Special-topic lectures

Andrew Atkeson (UCLA): Are Banks Safer?

Valerie Ramey (University of California at San Diego): Government Spending Multipliers

Ricardo Reis (London School of Economics): Quantitative Easing

Practicum

The course lectures are complemented with afternoon sessions designed to provide participants with hands-on experience with the techniques presented.

Logistics

The workshop takes place at the Kellogg Global Hub located on the shores of Lake Michigan at Northwestern University's Evanston campus.



CENTER FOR
INTERNATIONAL
MACROECONOMICS
NORTHWESTERN UNIVERSITY

Advanced Workshop For Central Bankers

Dates

The workshop will take place from Tuesday, September 3 to Tuesday, September 10, 2019. Participants are expected to arrive on Tuesday, September 3 and leave in the afternoon of Tuesday, September 10, 2019. Participants who are interested in attending the Optional Review Session on Tuesday, September 3, 2019 are expected to arrive on Monday, September 2, 2019. This optional session is devoted to a comprehensive tutorial on what you need to know about Matlab to be able to use the software employed in the course.

Schedule

A preliminary workshop schedule is attached.

Software and lecture materials

At the end of the workshop, participants receive all the lecture materials and programs used during the practicum sessions.

Price

The cost of the program is \$7,200 per participant. The fee (payable in U.S. dollars) includes tuition, course materials, accommodations, social program, meals, coffee breaks, and receptions. Enrollment is confirmed only upon receipt of full payment.

Cancellations made before June 1st, 2019 are subject to a 25% fee.

Cancellations made after June 1st, 2019 are subject to the total charge.



CENTER FOR
INTERNATIONAL
MACROECONOMICS
NORTHWESTERN UNIVERSITY

Advanced Workshop For Central Bankers

Advanced Workshop for Central Bankers Schedule, 2019

	03/Sep Tuesday	04/Sept Wednesday	05/Sept Thursday	06/Sept Friday	07/Sept Saturday	08/Sept Sunday	9/Sept Monday	10/Sept Tuesday
7:30 AM to 9:00 AM		Breakfast, Allen Center	Breakfast, Allen Center	Breakfast, Allen Center	Breakfast, Allen Center	Breakfast, Allen Center	Breakfast, Allen Center	Breakfast, Allen Center
9:00 AM to 10:30 AM		Using VARs Martin Eichenbaum	DSGE models Lawrence Christiano	Model estimation Lawrence Christiano	Financial frictions Lawrence Christiano	Open-economy models Sergio Rebelo	Macro-prudential regulation Thomas Philippon	Macro Forecasting with big data Giorgio Primiceri
10:30 AM to 10:45 AM		Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
10:45 AM to 12:15 PM		Using VARs Martin Eichenbaum	DSGE models Lawrence Christiano	Model estimation Lawrence Christiano	Financial frictions Lawrence Christiano	Open-economy models Sergio Rebelo	Macro-prudential regulation Thomas Philippon	Macro Forecasting with big data Giorgio Primiceri
12:15 PM to 1:30 PM		Lunch	Lunch	Lunch	Lunch	Lunch	Lunch	Lunch
1:30PM to 4:00 PM		Practicum Session	Practicum Session	Chicago Architectural River Cruise (starts at 3:30 pm)	Practicum Session	Hank models Matthew Rognlie	Hank models Matthew Rognlie	
4:00 PM to 4:15 PM		Coffee Break	Coffee Break		Coffee Break		Practicum Session	Coffee Break
4:15 PM to 5:30 PM	Optional Matlab Review Session 3:30 pm - 5:30 pm	Valerie Ramey Government Spending Multipliers	Andrew Atkeson Are Banks Safer?				Ricardo Reis, Quantitative Easing	
5:30PM to 6:30 PM	Dinner	Cocktails	Cocktails		Dinner			
6:30PM to 8:00 PM		Dinner	Dinner		Bus to Chicago Theater	Optional Dinner	Celebration dinner at Stained Glass (7:15 pm)	
					Show at Chicago Theater			



CENTER FOR
INTERNATIONAL
MACROECONOMICS
NORTHWESTERN UNIVERSITY