

Spring 2019 Highlights



Photo: Paul Krugman, 2008 Nobel Laureate



Photo (from left to right): Omar Sayed ('96 CC), Ethan Philips (Director of International Development and Funding Initiatives), Bernard Salanié (Professor and Chair)

MARCH

PER Mini-Course

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Tim Roughgarden Professor of Computer Science epartment of Computer Science Columbia University

Part I: Thursday, March 7, 2019 3:00pm - 5:00pm (1102 IAB)

Part II: Friday, March 8, 2019 10:00am-12:00pm (402B IAB)



Computer Science and Economics: A Conversation

Around 20 years ago, motivated by the explosion of the Internet, many computer scientists became interested in economics and game theory. Applications requiring economic reasoning at that time ranged from network routing with competing Internet Service Providers to the design of real-time auctions for online advertising. More recently, the flow of ideas has increasingly traveled also in the opposite direction, from computer science to economics and game theory. What can computer science bring to the table, beyond new and interesting applications? Several things, including computational considerations, approximation guarantees to go beyond the traditional limitations of exact solutions, and techniques from machine learning to relax standard informational assumptions. This course will touch on some of the instructor's research on the interface of computer science and economics from the past 20 years, including approximation guarantees for equilibria (i.e., "price of anarchy" bounds), the power and limitations of "simple" mechanisms, and a data-driven analog of Myerson's optimal auction theory.

For more information and to RSVP, please visit:
econ.columbia.edu/per/programs/per mini
DCOLUMBIA TCONOMICS
Program for Economic Research

PER Mini-Course

Xavier Gabaix

Pershing Square Professor of Economics and Finance Department of Economics Haroard University

Part I: Thursday, March 28, 2019 4:30pm-6:30pm (1120 IAB)

Part II: Friday, March 29, 2019 2:00pm-4:00pm (1027 IAB)

Bounded Rationality in Micro and Macro

It is clear that rationality is bounded, and that this should matter for outcomes and policy. This mini-course will cover revent models of bounded rationality making progress on those issues, and their empirical counterparts. We will review basic models of bounded rationality and mattention, emphasizing those that are tractable and can be taken to the data. In addition, we will develop a behavioral version of basic microeconomics (consumer theory, Arrow Debreu). Then, we'll revisit the basics of optimal taxation theory (Ramsey, Pigou, Mirrlees), and see how they change with bounded rational agents. Then we'll be ready to go to macroeconomics. We'll cover a behavioral version of basic macroeconomics (the consumption-savings model and the neoclassical growth model), then go on to monetary economics and optimal monetary and fiscal policy with behavioral agents.

Throughout the course, we'll review empirical versions of those models, emphasizing recent progress in measurement of behavioral phenomena, and opportunity for new research.

The Program for Economic Research sponsored two Mini-Courses this semester. Over 80 students and faculty attended. Tim Roughgarden's (Columbia) course touched on some of his research on the interface of computer science and economics from the past 20 years; and, Xavier Gabaix's (Harvard) course reviewed basic models of bounded rationality and inattention, emphasizing those that are tractable and can be taken to the data.

The Economics of Early Childhood Intervention



Over 100 students and faculty attended our special evening lecture titled, **The Economics of Early Childhood Intervention** on Tuesday, March 5, 2019. Reflecting on recent findings in the field, panelists examined the costs and benefits of early childhood education programs.

Panelists included: **Janet Currie** (Princeton), **Jane Waldfogel** (Columbia), and **Douglas Almond** (Columbia). **Miguel Urquiola** (Columbia) served as moderator, and **David Weinstein** delivered the welcome.

APRIL

America and the New Protectionism, Monday, April 1, 2019









The Program for Economic Research hosted a panel discussion titled, America and the New Protectionism this spring. Over 200 scholars attended the event, which was held at the Italian Academy. The panel featured Paul Krugman, 2008 Nobel Laureate and Distinguished Professor at The Graduate Center; Pinelopi K. Goldberg, Chief Economist at the World Bank Group and Elihu Professor of Economics, Yale University; David Weinstein (Columbia); and, moderated by Amit Khandelwal (Jerome A. Chazen Professor of Global Business, Columbia Business School). Maya Tolstoy, Interim Executive Vice President and Dean of the Faculty of Arts and Sciences Professor of Earth and Environmental Sciences at Columbia University delivered the welcome.

PER Distinguished Lecture



On Friday April 19, 2019, Harald Uhlig delivered a lecture titled, "Some Simple Bitcoin Economics" at Faculty House.

Professor Harald Uhlig considers the possibility of a future world where a privately issued currency such as bitcoin is used as a perfect substitute for goods purchases alongside an official currency such as the U.S. dollar, issued by a central bank who seeks to achieve a particular dollar inflation target. This framework will be used to derive implications for pricing, extending classic results by Kareken-Wallace, conditions that imply absence of speculation and consequences for dollar monetary policy.

Harald Uhlig is the Bruce Allen and Barbara Ritzenthaler Professor of Economics in the Kenneth C. Griffin Department of Economics at the University of Chicago. His research interests are in macroeconomics, financial markets and Bayesian econometrics, and in particular at the intersection of these three. He is currently the Managing Editor of the Journal of Political Economy (JPE), and serves as a consultant of the Bundesbank, European Central Bank and the Federal Reserve Bank of Chicago.

PER Weekly Visitors



Dionissi Aliprantis Federal Reserve Bank of Clevelan



Camille Landais London School of Economics



Conrad Miller UC Berkeley, Haa



Yuseke Narita



Rema Hanna Harvard

This spring the Program for Economic Research hosted five faculty members from peer institutions such as Harvard, Yale, UC Berkeley and London School of Economics. A special thanks for all faculty nominations!

PER Faculty Lunch Series

- Serena Ng, Thursday, February 28, 2019
- Eric Verhoogen, Thursday, May 9, 2019

APRIL



We are delighted to announce the release of the Tenth Anniversary edition of the **Columbia Economic Review** (CER) Journal!

The Department is proud to support undergraduate research and to encourage critical thinking in our students. This issue shows the diversity of the questions that shape our field: from questioning the efficacy of biomedical research in the field, to analyzing the coasts of legislative turnover, immobile labor and corruption in India, and further assessing the determinants of nationalism and the effects of conscription on national pride. Congratulations to all!

MAY Workshop on Efficient Coding and Resource-Limited Cognition, Friday, May 10, 2019



Economists, computer scientists and computational neuroscientists have all been interested in models in which the structure of the internal representations on which decisions are based is assumed to represent an efficient use of finite cognitive resources. Theories of this kind go by different names ("efficient coding," "rational inattention," "information bottleneck," etc.), and the nature of the assumed resource constraint also differs in different strands of the literature. This conference, the latest in a series of Columbia University interdisciplinary conferences on the cognitive foundations of decision making, brings together leading researchers representing several of these approaches, to discuss both their foundations and important applications.

The workshop keynote speakers included **Naftali Tishby** (Hebrew University) and **Andrew Caplin** (NYU), and additional talks by **Matt Botvinick** (DeepMind), **Rafael Polania** (ETH Zurich), **Aldo Rustichini** (Minnesota), **Sophia Sanborn** (UC Berkeley), **Alan Stocker** (Penn), and **Noga Zaslavsky** (Hebrew University).

The workshop was co-organized by **Michael Woodford** (Columbia) and **Rava Azeredo da Silveira** (ENS Paris), and sponsored by the Program for Economic Research.

We hope you enjoyed the semester with us and look forward to welcoming you to more events and activities in the fall.

Have a Great Summer!