

# Barcelona GSE Summer Forum

Balmes Building, Balmes 132 - Barcelona

## MACHINE LEARNING FOR ECONOMICS

JUNE 17-18, 2019, Room 207 (Second Floor)

### PROGRAM FOR MONDAY, JUNE 17

08:30	Registration
<b>Session 1</b>	
09:00 – 09:40	Stéphane Bonhomme (University of Chicago) “Discretizing Unobserved Heterogeneity” (with Thibaut Lamadon and Elena Manresa)
09:40 – 10:20	Dmitry Arkhangelsky (CEMFI) “Synthetic Difference in Differences” (with Susan Athey, David Hirshberg, Guido Imbens and Stefan Wager)
10:20 – 11:00	Carlos Carvalho (The University of Texas at Austin) “Bayesian Regression Tree Models for Causal Inference: Regularization, Confounding, and Heterogeneous Effects” (with P. Richard Hahn and Jared Murray)
11:00	Coffee Break*
<b>Session 2</b>	
11:30 – 12:10	Andreas Dzemski (University of Gothenburg) “Confidence set for group membership” (with Ryo Okui)
12:10 – 12:50	Piotr Zwiernik (UPF and Barcelona GSE) “Total Positivity in Graphical Models” (with Steffen Lauritzen and Caroline Uhler)
12:50 – 13:30	Katerina Petrova (University of St. Andrews) “A generalised lp-norm filter for time-varying parameter models”
13:30	Lunch*
<b>Poster Session</b>	
14:30 – 16:30	POSTER SESSION
16:30	Coffee Break*
<b>Session 3</b>	
17:00 – 17:40	Ying-Ying Lee (University of California Irvine) “Double Machine Learning Nonparametric Inference on Continuous Treatment Effects”
20:30	Workshop Dinner*

## PROGRAM FOR TUESDAY, JUNE 18

### Session 4

09:40 – 10:20	<a href="#">Elena Manresa</a> (New York University) “Artificial Intelligence for Structural Estimation” (with Guillaume Pouliot and Tetsuya Kaji)
10:20 – 11:00	<a href="#">Elena Erosheva</a> (University of Washington Seattle and Université Côte d'Azur) “Analyzing JSTOR corpus of publications: Is there gender homophily in scientific collaborations?” (with Y. Samuel Wang, Carole J. Lee, Jevin D. West and Carl T. Bergstrom)
11:00	<i>Coffee Break*</i>

### Session 5

11:30 – 12:10	<a href="#">Milena Suárez Castillo</a> (INSEE and CREST) “Disentangling the causal effects of air pollutants on health: when the numerous characteristics of the planetary boundary layer can help” (with Alexandre Godzinski)
12:10 – 12:50	<a href="#">Andrea Naghi</a> (Erasmus University Rotterdam) “The Value Added of Machine Learning to Causal Inference: Evidence from Six Revisited Studies” (with Anna Baiardi)
12:50 – 13:30	<a href="#">David Childers</a> (Carnegie Mellon University) “Automated Solution of Heterogeneous Agent Models”
13:30	<i>Lunch*</i>

### Session 6

14:30 – 15:10	<a href="#">Michael Knaus</a> (University of St. Gallen) “Machine Learning Estimation of Heterogeneous Causal Effects: Empirical Monte Carlo Evidence” (with Michael Lechner and Anthony Strittmatter)
15:10 – 15:50	<a href="#">Ivan Fernandez-Val</a> (Boston University) “Generic Machine Learning Inference on Heterogeneous Treatment Effects in Randomized Experiments” (with Victor Chernozhukov, Mert Demirer and Esther Duflo)

### Workshop Organizers:

- [PETROS DELLAPORTAS](#) (University College London and Alan Turing Institute)
- [STEPHEN HANSEN](#) (University of Oxford and Alan Turing Institute)
- [OMIROS PAPASPILIOPOULOS](#) (ICREA-UPF and Barcelona GSE)
- [MARTIN WEIDNER](#) (University College London and Alan Turing Institute)

The organizers gratefully acknowledge financial support from the Economic and Social Research Council through the ESRC Centre for Microdata Methods and Practice grant RES-589-28-0001.

The Barcelona GSE Summer Forum is an initiative of the Severo Ochoa Research Program 2016-2019 (SEV2015-0563) of the Barcelona Graduate School of Economics, funded by the Spanish Ministry of Science, Innovation and Universities.

\* Meals are provided by the organization

POSTER SESSION  
Room Versa (Sixth Floor)

PROGRAM FOR MONDAY, JUNE 17

Poster Session

**IRENE BOTOSARU** (University of Bristol) “Binarization for Panel Models with Fixed Effects”

**PATRICK BURAUDEL** (DIW Berlin) “Vector-induced spectral measures and instrument exogeneity”

**DANIEL CHEN** (Toulouse School of Economics) “Implicit Bias in the Judiciary” (with Elliott Ash and Arianna Ornaghi)

**RICCARDO D’ADAMO** (University College London) “Cluster-Robust Inference for Linear Regression Models with Many Controls”

**HUGO FREEMAN** (University College London) “Estimation in Panel Data Models with Interactive Fixed Effects”

**ANDREAS JOSEPH** (Bank of England and King's College London) “Shapley regressions: A framework for statistical inference on machine learning models”

**NIKOLAS KUHLEN** (The Alan Turing Institute) “Technology Shocked! How the Evolving Structure of Knowledge Affects Firm Performance”

**STEVEN LEHRER** (Queen's University and NBER) “An Initial Assessment of the Hype for Machine Learning Strategies for Causal Effects”

**SIMON SMITH** (University of Southern California) “Forecasting Panel Data with Structural Breaks and Regime-specific Grouped Heterogeneity”

**DALIBOR STEVANOVIC** (Université du Québec à Montréal) “How is Machine Learning Useful for Macroeconomic Forecasting?” (with Philippe Goulet-Coulombe, Maxime Leroux and Stephane Surprenant)