

# 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	<b>Elena Manresa</b> (New York University) “Artificial Intelligence for Structural Estimation” (with Guillaume Pouliot and Tetsuya Kaji)
10:20 – 11:00	<b>Elena Erosheva</b> (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	<b>Milena Suárez Castillo</b> (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	<b>Andrea Naghi</b> (Erasmus University Rotterdam) “The Value Added of Machine Learning to Causal Inference: Evidence from Six Revisited Studies” (with Anna Baiardi)
12:50 – 13:30	<b>David Childers</b> (Carnegie Mellon University) “Automated Solution of Heterogeneous Agent Models”
13:30	<i>Lunch*</i>

### Session 6

14:30 – 15:10	<b>Michael Knaus</b> (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	<b>Ivan Fernandez-Val</b> (Boston University) “Generic Machine Learning Inference on Heterogeneous Treatment Effects in Randomized Experiments” (with Victor Chernozhukov, Mert Demirer and Esther Dufo)

Workshop Organizers:

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

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\* 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)