# WORKSHOP ON ECONOMETRIC THEORY AND APPLICATIONS

UNIVERSITY OF SIENA

DEPARTMENT OF ECONOMICS AND STATISTICS

SIENA, JUNE 22-23, 2023

## THURSDAY, 22 JUNE 2023

#### 8:15-10:00 Registration

9:00-9:15 WELCOME SPEECH Salvatore Bimonte (U of Siena) Head of the Department of Economics and Statistics

Michelangelo Vasta (U of Siena) Rector's Delegate for Research

# 9:15-10:05 SESSION 1 David Pacini (U of Bristol) Bias and Variance of Estimators in the Presence of Hellinger Speedless Points Stanislav Anatolyev (CERGE-EI, NES) Many Instruments under Data Clustering with Maksim Smirnov

#### 10:05-10:30 Coffee break

10:30-11:30 KEYNOTE LECTURE **Anna Mikusheva** (MIT) *Linear Regression with Weak Exogeneity* with Mikkel Sølvsten

## 11:30-12:20 SESSION 2 **Thomas Carr** (Brown U) *Testing Instrument Validity with Covariates* with Toru Kitagawa

# FRIDAY, 23 JUNE 2023

#### 9:15-10:05 Session 5

Ashish Patel (U of Cambridge) Selecting Invalid Instruments to Improve Mendelian Randomization with Two-sample Summary Data with Francis J. Di-Traglia, Verena Zuber and Stephen Burgess
Elisabetta De Cao (U of Bologna) Gene-Environment Effects on Female Fertility with Nicola Barban and Marco Francesconi

#### 10:05-10:30 Coffee break

10:30-11:30 KEYNOTE LECTURE Jochen Mierau (U of Groningen, Lifelines, U Medical Centre Groningen) Lifestyle, Socioeconomic Differences, and Health Policy

#### 11:30-12:20 Session 6

**Michael Bates** (U of California Riverside) Estimating the Price Elasticity of Gasoline Demand in Correlated Random Coefficient Models with Endogeneity with Seolah Kim

**Daniel Gutknecht** (Goethe U Frankfurt) Distributional Difference-in-Differences for Underreported Discrete Outcomes with Cenchen Liu

#### 12:20-13:20 Lunch

Toru Kitagawa

**Zhenhong Huang** (U of Hong Kong) Assessing the Strength of many Instruments with the First-stage F and Cragg-Donald Statistics with Chen Wang and Jianfeng Yao

#### 12:20-13:20 Lunch

#### 13:20-14:20 Poster session

**Lorenzo Casini** (IMT Lucca) *Ill-defined Variables and Instrument Validity* with Alessio Moneta

**Federico Crudu** (U of Siena) Jackknife Instrumental Variable Inference with Giovanni Mellace and Zsolt Sándor

**Petru Crudu** (Ca' Foscari U of Venice) Long-term Effects of Early Adverse Labour Market Conditions: A Causal Machine Learning Approach

**Roberta Di Stefano** (Sapienza U of Rome) *The Inclusive Synthetic Control Method* with Giovanni Mellace

#### 14:20-15:10 Session 3

Tom Boot (U of Groningen) Identification- and Many Instrument-robust Inference via Invariant Moment Conditions with Johannes W. Ligtenberg
Igor L. Kheifets (U of Klagenfurt) Robust High-Dimensional IV Cointegration Estimation and Inference with Peter C. B. Phillips

#### 15:35-16:25 Session 4

#### 13:20-14:20 Poster session

Simon Lloyd (Bank of England) Controls, Not Shocks: Estimating Dynamic Causal Effects in the Face of Confounding Factors with Ed Manuel
Alexander O. K. Marin (U of Southern Denmark, CPop) The Simultaneous Causal Effects Between Hospital Expenditures and Social Care Expenditures with Malene Kallestrup-Lamb and Jes Søgaard

Hamdi Raïssi (Instituto de Estadística, PUCV) On the Correlation Analysis of Stocks with Zero Returns

**Renan Serenini** (Sapienza U of Rome) A Spatial Extension of Synthetic Difference-in-Differences with Frantisek Masek

Anton Skrobotov (Imperial College Business School) New Approaches to Robust Inference on Market (Non-) Efficiency, Volatility Clustering and Nonlinear Dependence with Rustam Ibragimov and Rasmus Søndergaard Pedersen

#### 14:20-15:10 Session 7

Nadja van't Hoff (U of Southern Denmark) Limited Monotonicity and the Combined Compliers LATE with Arthur Lewbel and Giovanni Mellace
Riccardo D'Adamo (U College London) Auxiliary IV Estimation for Nonlinear Models with Martin Weidner and Frank Windmeijer

#### 15:10-15:35 Coffee break

#### 15:35-16:25 Session 8

Silvia Tiezzi (U of Siena) Egg when Young, Chicken when Old? Time Consistency and Addiction over the Life Cycle with Luca Piccoli
Elena Dal Torrione (Tor Vergata U of Rome) Regression Discontinuity Designs Under Interference with Tiziano Arduini and Laura Forastiere

Andrea A. Naghi (Erasmus U and Tinbergen Institute) The Value Added of Machine Learning to Causal Inference: Evidence from Revisited Studies with Anna Baiardi

**Alejandro Sánchez-Becerra** (Emory U QTM) Robust Inference for the Treatment Effect Variance in Experiments Using Machine Learning

ORGANIZERS Federico Crudu (U of Siena), Giovanni Mellace (U of Southern Denmark), Zsolt Sándor (Sapientia Hungarian U of Transylvania)

