



# Advances in Spatial and Network Modelling for Policy Making

Sapienza University of Rome, May 29<sup>th</sup> and 30<sup>th</sup> 2025

Venue: Facoltà di Economia, via del Castro Laurenziano 9, Sala Lauree - 2<sup>nd</sup> floor (Keynote lectures and sessions a) and Sala Acquarietto - ground floor (sessions b)

## May 29<sup>th</sup>

13:30 Registration and welcome address

14:00-15:00 **Keynote Lecture** - "The W Matrix in Network Econometrics: Specification, Estimation and Policy Implications" by Luisa Corrado, University of Tor Vergata

### Session 1a. *Regional growth*

**Chair: Ugo Fratesi (Polytechnic University of Milan)**

15:15-15:45 "Regional economic growth and unemployment: A system of endogenous spatial Diff-in-Diff equations" **Riccardo D'Alberto (University of Verona)** (joint with Sivia Emili). *Discussant: Massimo Giannini.*

15:45-16:15 "The evolution of agglomeration patterns in Italian manufacturing and services" **Alberto Tidu (CRENoS, Università di Cagliari)** (joint with Ugo Gragnolati and Stefano Usai). *Discussant: Riccardo D'Alberto.*

16:15-16:45 "Forecasting Italian Municipalities' Income by Nightlights. Testing Alternative Deep Learning Nets" **Massimo Giannini (University of Tor Vergata)**. *Discussant: Alberto Tidu.*

### Session 1b. *Local network systems*

**Chair: Valerio Leone Sciabolazza (Sapienza University of Rome)**

15:15-15:45 "Experimental Combination of Digital Twin and Spatio-economic Microsimulation in PNRR Policy Impact Evaluation" **Immanuel Satya Pekerti (Politecnico Milano)**. *Discussant: Francesco Castellano.*

15:45-16:15 "Economic Resilience and Connectivity: A Study on Italian Urban Networks" **Elena Calegari (Università Cattolica del Sacro Cuore)** (joint with Aura Reggiani). *Discussant: Immanuel Satya Pekerti.*

16:15-16:45 "Shaping the geography of innovation: a mobility network analysis on mRNA COVID-19 vaccines' investors" **Francesco Castellano (Sapienza University of Rome)**. *Discussant: Elena Calegari.*

16:45-17:15 **Coffee Break**

## **Session 2a. Local governments**

**Chair: Carolina Serpieri (Sapienza University of Rome)**

17:15-17:45 “Looking within a large city: the effect of sub-municipal amalgamations in Rome on voter turnout” **Alessandra Scerbo (Sapienza University of Rome)** (joint with Augurto Cerqua and Gabriele Pinto). *Discussant: Elsa Amaddeo.*

17:45-18:15 “Empirical Analysis of Quantity and Quality of Rural Entrepreneurship in France, Germany and UK: Understanding Key Enabling Factors” **Daniel Fernando De Souza (Polytechnic University of Milan)** (joint with Massimo G. Colombo, Lena Fünér, Massimiliano Guerini, and Hanna Hottenrott). *Discussant: Alessandra Scerbo*

18:15-18:45 “The heterogeneous effect of the Italian Special Economic Zones on firms: a regional analysis” **Elsa Amaddeo (University of Bari)** (joint with Angela Stefania Bergantino and Giulio Fusco). *Discussant: Daniel Fernando De Souza.*

## **Session 2b. Taxation and Fiscal Policies**

**Chair: Paolo Di Caro (Italian Ministry of Economics and Finance)**

17:15-17:45 “Does private supply drive personal health choices? A spatial approach of health tax deductions at the municipal level” **Francesco Porcelli (Sapienza University of Rome)** (joint with Mauro Maré and Francesco Vidoli). *Discussant: Francesco Figari.*

17:45-18:15 “EUROMODspatial Italy: a tax-benefit spatial microsimulation model for the analysis of public policies at local level” **Francesco Figari (University of Eastern Piedmont)** (joint with Stefano Boscolo, Carlo Fiorio, Marcello Matranga, Manos Matsaganis). *Discussant: Francesco Porcelli.*

18:15-18:45 “Rural vs Urban: electoral behaviour in Italy” **Oumar Ben Salha (University of Brescia)**. *Discussant: Nicola Pontarollo.*

**20:00 Dinner at “La Limonaia”**

**May 30<sup>th</sup>**

## **Session 3a. Digital transformation**

**Chair: Cristiana Fiorelli (Sapienza University of Rome)**

09:30-10:00 “Digital Transformation, Quality of Government and Productivity Growth in European Regions” **Antonio Pacifico (University of L’Aquila)** (joint with Nadia Fiorino, Maria Gabriela Ladu and Marco Amendola). *Discussant: Silvia Mattiozzi.*

10:00-10:30 “Artificial Intelligence and regional disparities” **Simone Salotti (JRC)** (joint with Pablo Casas, Tryfonas Christou, Abián García-Rodríguez and Nicholas Lazarou). *Discussant: Antonio Pacifico.*

10:30-11:00 “Unveiling the Drivers of Digital Transformation: A Spatial Analysis of the National Recovery and Resilience Plan in Italian Municipalities” **Silvia Mattiozzi (Università Politecnica delle Marche)** (joint with Barbara Ermini and Raffaella Santolini). *Discussant: Simone Salotti.*

### **Session 3b. *Mobility of capitals and people***

**Chair: Valerio Leone Sciabolazza (Sapienza University of Rome)**

09:30-10:00 “Institutional Quality & Ph.D. holders’ migration” **Adriana Pinate (GSSI)** (joint with Martina Dal Molin and Claudio Di Bernardino). *Discussant: Onur Biyik.*

10:00-10:30 “Space-Time Dynamics of Interprovincial Migration Flows in China, 1985–2020” **Roberto Patuelli (University of Bologna)** (joint with Yingxia Pu and Guangqing Chi) *Discussant: Adriana Pinate.*

10:30-11:00 “Competing Roads to Africa: How BITs Reshape Japan-Africa Trade and Challenge China’s Expansion” **Onur Biyik (University of Milan)**. *Discussant: Roberto Patuelli.*

**11:00-11:30 Coffee Break**

### **Session 4a. *Firms***

**Chair: Nicola Pontarollo (University of Brescia)**

11:30-12:00 “Firm interactions and potential ecosystems” **Pietro Vicari (Politecnico Milano)** (joint with Ugo Fratesi). *Discussant: Federica Galli.*

12:00-12:30 “Divestment strategies in multinational firms: the role of peer effects and geographical distance” **Chiara Castelli (WU, wiiw)**. *Discussant: Pietro Vicari.*

12:30-13:00 “A simultaneous system of dynamic spatial stochastic frontier models with dependent error components and inefficiency determinants” **Federica Galli (University of Bologna)** (joint with Silvia Emili). *Discussant: Chiara Castelli.*

### **Session 4b. *Regional Development and Cohesion***

**Chair: Cristiana Fiorelli (Sapienza University of Rome)**

11:30-12:00 “Strategic Planning for Water and Energy Interventions to Boost Socioeconomic Development: A Spatial Analysis in Uganda” **Paola Casati (University of Bari and JRC)** (joint with Magda Moner-Girona, Sandor Szabo, Alessandro Rubino, Irene Angeluccetti and Luca Battistella). *Discussant: Kelly Cioppa.*

12:00-12:30 “The Geography of the Green Transition: Big Promises, Uneven Outcomes” **Giulio Breglia (GSSI)** (joint with Giulia Valeria Sonzogno). *Discussant: Paola Casati.*

12:30-13:00 “The role of interdependence in the adoption of environmental provisions in preferential trade agreements: a spatial econometric approach” **Kelly Cioppa (University of Liege-HEC)** (joint with Joe Tharakane). *Discussant: Giulio Breglia.*

**13:00-14:00 Buffet Lunch**

**14:00-15:00 Keynote Lecture - “On the specification of spatial panel models”, by Giovanni Millo, University of Trieste**

### **Session 5a. *Public policies***

**Chair: Angela Stefania Bergantino (University of Bari)**

15:15-15:45 “The Impact of the RDC on the Italian Labour Market” **Massimo Aprea (Sapienza University of Rome)** (joint with Luca Giangregorio and Michele Raitano). *Discussant: Marco Letta*

15:45-16:15 “‘Dead Man Working’: A Place-based Approach to Occupational Safety and Health” **Marco Letta (Sapienza University of Rome)** (joint with Augusto Cerqua, Costanza Giannantoni and Gabriele Pinto). *Discussant: Massimo Aprea*

### **Session 5b. *Firms***

**Chair: Carolina Serpieri (Sapienza University of Rome)**

15:15-15:45 “Survival and Agglomeration through Innovation and Learning: Nonproportional hazards spatial models for Italian Manufacturing Firms” **Fernanda Mazzotta (University of Salerno)** (joint with Arnab Bhattacharjee). *Discussant: Raffaele Boffardi.*

15:45-16:15 “Is there a role for public investment policies in the promotion of firm’s performance? Evidence from Cohesion Policy implementation in Italy” **Raffaele Boffardi (University of Naples L’Orientale)** (joint with Roberta Arbolino and Luisa De Simone). *Discussant: Fernanda Mazzotta.*