



2nd ITALIAN CONFERENCE ON ECONOMIC STATISTICS

STATISTICAL ANALYSIS OF COMPLEX ECONOMIC DATA: RECENT DEVELOPMENTS AND APPLICATIONS

7th February 2024

13:30 Welcome and Registration – Novoli Campus, D6

14:00 Opening and Institutional Greetings – Novoli Campus, D6/0.18

14:30 Keynote speech – Novoli Campus, D6/0.18

ANNA GOTTARD, University of Florence
Florence Center for Data Science: Rethinking Data Science

15:00 Keynote speech – Novoli Campus, D6/0.18

MATTEO MARIA PELAGATTI, University of Milano-Bicocca
The Bicocca Data Science Lab

15:30 Coffee break

16:00 Invited session, Novoli Campus, D6/0.18
Economic complexity in time series

Chair: **FABRIZIO CIPOLLINI**, University of Florence

Discussant: **GIAMPIERO GALLO**, Corte dei Conti and New York University in Florence

Optimal forecasts for multivariate Markov switching autoregressive models
MADDALENA CAVICCHIOLI, University of Bologna

Combining value-at-risk and expected shortfall measures

ANTONIO NAIMOLI, University of Salerno

ALESSANDRA AMENDOLA, University of Salerno

VINCENZO CANDILA, University of Salerno

GIUSEPPE STORTI, University of Salerno

Illiquidity tail risk and its economic determinants

DEMETRIO LACAVA, University of Messina

PAOLO SANTUCCI DE MAGISTRIS, Luiss University

17:15 Session of contributed papers (1) – Novoli Campus, D6/0.18
Data complexity and digitalization

Chair: **DANIELE VIGNOLI**, University of Florence

Natural selection or strategic adaptation? entrepreneurial digital technologies and survival of the species

DAVID B. AUDRETSCH, **MARTINA ARONICA**, **MAKSIM BELITSKI**, **DAVIDE PIACENTINO**

Analysis of the digital divide through Facebook data: a finite mixture approach

DALILA FAILLI, **BRUNO ARPINO**, **MARIA FRANCESCA MARINO**, **EMILIO ZAGHENI**

Probabilistic networks for bankruptcy risk prediction: a pilot study on Italian farms

ALESSANDRO MAGRINI, **FEDERICO MATTIA STEFANINI**

Business digitalization in Italy: a comprehensive analysis using supplementary fuzzy set approach

ILARIA BENEDETTI, **FEDERICO CRESCENZI**, **TIZIANA LAURETI**

Data and models: the role of statistical information systems

GIORGIO GARAU, **FABRIZIO ANTOLINI**, **LUCIA SCHIRRU**, **GIANCARLO ONNIS**, **ADRIANO COLOSIMO**

17:15	Session of contributed papers (2) – Novoli Campus, D6/0.13 <i>Spatial data complexity</i>
	<u>Chair</u>: EMILIA ROCCO, University of Florence <i>Economic Fitness of municipalities</i> ALESSANDRO BELLINA, ALESSIO BUMBEA, GIUSEPPE ESPA, ANDREA MAZZITELLI, MATTEO STRACCAMORE, ANDREA TACHELLA <i>Evaluating bias in spatial big data using H3 spatial indexing</i> VINCENZO NARDELLI, NICCOLÒ SALVINI <i>Using scanner data and the multisource approach in estimating Italian Spatial Price Indices</i> ALESSANDRO BRUNETTI, ANNA DI FRANCO, BARBARA DRAMIS, TIZIANA LAURETI, FEDERICO POLIDORO, AGOSTINA ZANOLI <i>The spatio-temporal Fay-Herriot model using the state-space method: an application to Italian Lombard agrarian sub-regions</i> FELICETTA CARILLO, PAOLO MARANZANO, LAURA MARCIS, MARIA CHIARA PAGLIARELLA, RENATO SALVATORE
18:30	Round-Table Talks – Novoli Campus, D6/0.18 <i>Statistical Measures for Economic Analysis: Innovation, Technology, Methods</i> <u>Moderator</u>: ANDREA CICCARELLI, University of Teramo
8th February 2024	
8:30	Registration – Novoli Campus, D6
9:00	Opening – Novoli Campus, D6/0.18 • FRANCESCA ADELE GIAMBONA, University of Florence • PAOLO MARIANI, University of Milano-Bicocca • VITTORIO NICOLARDI, University of Bari
9:30	Plenary session – Novoli Campus, D6/0.18 <i>Small area estimation approach and penalized power mean composite indicators to assess multidimensional poverty at local level</i> FRANCESCO MARIA CHELLI, Istat Acting President - Marche Polytechnic University CHIARA GIGLIARANO, LIUC Cattaneo University
10:00	Coffee break
10:30	Invited session, Novoli Campus, D6/0.18 <i>Application of large and complex data in spatial data analysis</i> <u>Chair</u>: ROSALIA CASTELLANO, Parthenope University of Naples <u>Discussant</u>: LUCA SALVATI, Sapienza University of Rome <i>Adjusting for neighbouring effects in measuring industry coagglomeration</i> MARIA MICHELA DICKSON, University of Trento GIUSEPPE ESPA, University of Trento DIEGO GIULIANI, University of Trento FRANCESCO SANTI, University of Trento <i>Exploring the complexities of modelling innovation spillovers: geographical contiguity vs economic proximity</i> EMMA BRUNO, Parthenope University of Naples ROSALIA CASTELLANO, Parthenope University of Naples GENNARO PUNZO, Parthenope University of Naples

Minimum income scheme in Italian regions. Evaluation of direct impacts and spatial spillovers
MARTINA ARONICA, University of Palermo
VALERIO GENOVESE, University of Palermo
DAVIDE PIACENTINO, University of Palermo

11:45 **Session of contributed papers (3) – Novoli Campus, D6/0.18**
Big data applications

Chair: TBD

Dimensions of corruption risks and profiles of winning companies over emergency periods
SIMONE DEL SARTO, NICCOLÒ SALVINI, MICHELA GNALDI

Initial Coin Offerings: can ESG mitigate Underpricing?
ALESSANDRO BITETTO, PAOLA CERCHIELLO

Assessing food affordability in Italy: A spatial-temporal analysis using web-scraped data
ILARIA BENEDETTI, FEDERICO CRESCENZI, TIZIANA LAURETI, LUIGI PALUMBO

Group detection in energy commodity markets through manifold-informed Wasserstein barycenter
CRISTIANO BALDASSARI, TIZIANA LAURETI, CARLO MARI

Saving food surplus or a new marketing tool? Exploring “Too Good To Go” at territorial level
TIZIANA LAURETI, LUIGI PALUMBO, LUCA SECONDI, MENGTING YU

11:45 **Session of contributed papers (4) – Novoli Campus, D6/0.14**
Data complexity in the tourism sector

Chair: FABRIZIO ANTOLINI, SISTUR President

Mobile network data for exploring tourism length of stay in the municipalities of Lombardy
FRANCESCO SCOTTI, ANDREA FLORI, PIERCESARE SECCHI, MARIKA ARENA, GIOVANNI AZZONE

Tourism sustainability in news media data
CARLA GALLUCCIO, FRANCESCA GIAMBONA, ALESSANDRA PETRUCCI

Reconstructing an integrated data system for tourism: a case study of Italian regions
FABRIZIO ANTOLINI, IVAN TERRAGLIA, SAMUELE CESARINI

Navigating uncertainty: unveiling the key levers of financial sustainability as a resilience strategy in the luxury industry
FABIO DEMARIA, MADDALENA CAVICCHIOLI

Does browsing behaviour and buying attitude change on the basis of access device? The case of Sunweb.nl
FURIO URSO, NICOLA ARGENTINO, ANTONINO ABBRUZZO, MARIA FRANCESCA CRACOLICI, REZA MOHAMMADI, KEVIN PAK

11:45 **Session of contributed papers (5) – Novoli Campus, D6/0.13**
Data complexity for environmental sustainability

Chair: TBD

A nonparametric three-variate regression analysis with application to Circular Economy
STEFANO BONNINI, MICHELA BORGHESI

Cluster analysis of climate change awareness across countries
GIANPAOLO ZAMMARCHI, CLAUDIO CONVERSANO

Modelling the Topics of Italian Tweets About the 2022 Energy Crisis
MATTEO FARNÈ, LAURA ZAVARISE

Estimating the effects of Iberian price cap using a Bayesian Multivariate synthetic control approach
GIULIO GROSSI

Assessing gender equality and inclusivity: a survey within the Italian life sciences sector
LAURA BENEDAN, CINZIA COLAPINTO, PAOLO MARIANI, LAURA PAGANI, MARIANGELA ZENGA

13:00 **Lunch**

14:00 **Invited session, Novoli Campus, D6/0.18**
itENBIS and StEering Center Session
Statistics for Engineering and Technology: New Challenges and Last Developments

Chair: **ROSSELLA BERNI**, University of Florence
Discussants: **GABRIELE PATRIZI**, University of Florence
NEDKA DECHKOVA NIKIFOROVA, University of Florence

Sustainability in lean & design for Six Sigma
GABRIELE ARCIDIACONO, Guglielmo Marconi University

Forecasting of correlated field-failures
ANTONIO PIEVATOLO, CNR-IMATI
FEDERICO CORTESE, CNR-IMATI

A statistical approach to the safe improvement of freight train efficiency
LUCIANO CANTONE, Tor Vergata University of Rome

15:30 **Session of contributed papers (6) – Novoli Campus, D6/0.18**
Statistical complexity for the analysis of enterprises

Chair: TBD

Cross-cultural implications in luxury brands social media advertising in China
FEDERICA CODIGNOLA

Bootstrapping methods on innovative start-ups
ALESSIO BUMBEA, GIUSEPPE ESPA, ANDREA MAZZITELLI, ALESSANDRO RINALDI

Licensing in Italy: consumer protection or rent-seeking problem? Evidence from a staggered difference in differences analysis using balance-sheet data of Italian pharmacies
FRANCESCO MAZZULLA, MERI RAGGI

Power laws in the shadow economy
MARIA FELICE AREZZO

Determinants of consumers' choice in Italian pasta market
SERGIO BRASINI, GIORGIO TASSINARI

15:30 **Session of contributed papers (7) – Novoli Campus, D6/0.13**
Data complexity for economic sustainability

Chair: TBD

The COVID19 impact on Italian firms' employment
ALESSANDRO ZELI, MATILDE BINI, LEOPOLDO NASCIA

Tail index regression forest
MARCO BEE, EMANUELE TAUFER, LUCA TRAPIN

Mortality and risk of cardiovascular diseases by age at retirement in three Italian cohorts
CHIARA ARDITO, GIUSEPPE COSTA, ANGELO D'ERRICO, ROBERTO LEOMBRUNI

Statistical inference for a quantile-based inequality indicator
SILVIA SCARPA, MARIA ROSARIA FERRANTE, STEFAN SPERLICH

Determinants of consumers' choice in Italian pasta market
DANILA FILIPPONI, MAURICIO GARNIER-VILLARREAL, DIMITRIS PAVLOPOULOS, ROBERTA VARRIALE

15:30	Session of contributed papers (8) – Novoli Campus, D6/0.14 <i>Temporal data complexity</i>
	<u>Chair:</u> TBD
	<i>An index of mental health: predicting the present</i> ERASMO VASSALLO
	<i>Assessing labor market shocks in Italy using a robust Hodrick-Prescott filter with structural breaks</i> PAOLO MARANZANO, MATTEO PELAGATTI
	<i>Multiple Seasonal ARIMA models</i> LUISA BISAGLIA, FRANCESCO LISI
	<i>HAR-based realized volatility clustering</i> PIERPAOLO D'URSO, RAFFAELE MATTERA, EDOARDO OTRANTO, LUCA SCAFFIDI DOMIANELLO
	<i>Impact analysis of PES in assisting young people in transitioning out of NEET status in Spain</i> OSCAR PRIETO FLORES, OMEED AGAHI, MAI BEILMANN, LEONOR BETTENCOURT, RŪTA BRAZIENĖ, GIOVANNI DE LUCA, MARTA ELENA, DILYANA KERANOVA, PAOLO MAZZOCCHI, VALENTINA MILENKOVA, MARIA ISABELL PELL DAMPERE, RICARDO BORGES RODRIGUES, ANTONELLA ROCCA, MIRIAM ROSA, FRANCISCO SIMÕES
16:45	Coffee break
17:15	Invited session, Novoli Campus, D6/0.18 <i>New data for the production of economic statistics</i>
	<u>Chair:</u> ANNAMARIA BIANCHI, University of Bergamo <u>Discussant:</u> TIZIANA LAURETI, Tuscia University
	<i>Regional economic sentiment index estimation using Google Trends data: a methodological approach and application to Spain</i> JOSEP DOMÈNECH, Universitat Politècnica de València ANDREA MARLETTA, University of Milano-Bicocca
	<i>Exploring International Trade in the recent geopolitical context, using Import Export Network Analysis (TERRA)</i> MAURO BRUNO, ISTAT FEDERICO BROGI, ISTAT ERIKA CERASTI, ISTAT FABRIZIO DE FAUSTI, ISTAT BARBARA GUARDABASCIO, University of Perugia
	<i>Quantification and impact on sales of customers' experience from reviews in social media</i> DOMENICA FIOREDISTELLA IEZZI, Tor Vergata University of Rome ROBERTO MONTE, Tor Vergata University of Rome
18:30	Plenary session – Novoli Campus, D6/0.18 <i>Bridging Data, Algorithms, and Human Talent: The Evolution of the Data Science Job Marketplace</i> ANDREA DE MAURO , Tor Vergata University of Rome
19:00	Closing remarks – Novoli Campus, D6/0.18 • FRANCESCA ADELE GIAMBONA, University of Florence • ANTONELLA ROCCA, Parthenope University of Naples • ROSALIA CASTELLANO, Parthenope University of Naples