2022

Innovation and Society 5.0:
Statistical and Economic Methodologies for
Quality Assessment

Department of Economics
Capua January 27 - 28, 2022

Università
degli Studi
della Campania
Luigi Vanvitelli

IES 2022 CONFERENCE
PROGRAM INNOVATION & SOCIETY 5.0:
STATISTICAL AND ECONOMIC METHODOLOGIES
FOR QUALITY ASSESSMENT

University of Campania "L. Vanvitelli"

Department of Economics, Gran Priorato di Malta, Capua (CE), Italy

January 27-28, 2022

2022

Dear Colleagues,

On behalf of the organizing committee, it is a pleasure to announce that the **10th Scientific Meeting of the Research Group of Statistics for the Evaluation and Quality in Services (SVQS)** of the *Italian Statistical Society*, titled **IES2022 Innovation and Society 5.0: Statistical and Economic Methodologies for Quality Assessment**, will be held on January 27th -28th 2022 at the University of Campania "L. Vanvitelli".

- **IES2022 - Innovation and Society 5.0: Statistical and Economic Methodologies for Quality Assessment** has the scientific finality to promote and coordinate the statistical and economic methodologies for the evaluation of a human-centered society emphasizing how statistical thinking, design and analysis may be of use to a Society 5.0, to foster advanced methodological research supporting the assessment of quality of social services, and to be a platform where the experts of Statistics, Data Mining, Data Science, Machine Learning and related disciplines meet for analysing Big Data.

Contributions based on the development of all innovative statistical methodologies as well as of all interesting applications are welcome. The subject-matter of the contributions cover the following areas (but not limited to):
Sustainability, Health, Wellness, Sport, Tourism, Education, Training and Research, Bank and FinTech, Transportation, Environment, Enterprise, Industry and Finance, E.commerce, Digital Marketing, Labour Market, Public Administration, Justice System.

The Conference is scheduled in 2 plenary sessions, 22 solicited sessions on specific topics and 11 contributed sessions. The Scientific Committee of the SIS group, the Program Committee and the Local Organizing Committee, with the support of the University of Campania "L. Vanvitelli", have contributed to the organization of this conference. We acknowledge their precious work.

We wish you a productive and stimulating conference and a pleasant stay at the University of Campania "L. Vanvitelli".

Rosaria Lombardo
Chair of the Program Committee

Luigi D'Ambra
Coordinator of the SVQS Group

Scientific Committee of the group of the Italian Statistical Society on Statistics for the Evaluation and Quality of Services – SVQS

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Luigi D'Ambra	University of Naples "Federico II"
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Paolo Mariani	University of Milan "Bicocca"
Marica Manisera	University of Brescia
Monica Palma	University of Salento
Pasquale Sarnacchiaro	University of Rome Unitelma Sapienza

Program Committee of the conference IES 2022

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Alessio Pollice	University of Bari
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Ida Camminatiello   University of Campania "L. Vanvitelli"
Antonello D'Ambra   University of Campania "L. Vanvitelli"
Rosaria Lombardo   University of Campania "L. Vanvitelli"
Elvira Romano   University of Campania "L. Vanvitelli"
Luca Rossi   University Cusano
Violetta Simonacci   University of Naples "L'Orientale"

Practical Information

The Venue

Department of Economics, University of Campania "L. Vanvitelli" - Via Gran Priorato di Malta - 81043 Capua (CE)

Old Capua was an ancient Italian city, the greatest Roman city of south Italy. For more information about the history of Capua and suggestions for tourist itineraries in the surrounding areas, we advise you to take a look at the following sites:

https://comune.capua.ce.it/

https://it.wikipedia.org/wiki/Capua_(citt%C3%A0_antica)

http://www.capuaonline.it/storiadicapua/index.html

http://www.paesionline.it/campania/capua/comune_capua.asp

HOW TO GET THE CONFERENCE LOCATION

Nearest international airports:

Naples International Airport – Capodichino (NAP) about 40 km

https://www.aeroportodinapoli.it/en

Roma Ciampino - Giovan Battista Pastine International Airport (CIA) about 180 km

https://www.adr.it/ciampino

Roma Fiumicino - Leonardo da Vinci Airport (FCO) about 200 km

https://www.adr.it/fiumicino

To reach Capua from Naples, Caserta or Rome please read the information below.

 By train

Many regional trains operated by Trenitalia connect **Naples** and **Caserta** to **Capua**. The journey will take approximately 50-55 minutes from Naples, 10-15 minutes from Caserta. If you are traveling from **Rome** you can find solutions with one change, generally in Naples or Cassino.

You can schedule your itinerary using the Italian railways website available here.

🚌 **By bus**

Several bus lines connect Caserta and Naples to Capua. Some options are provided below, organized by departure location.

We still strongly suggest you plan your itinerary and check up-to-date timetables through the Moovit App/website (click here) prior to your journey.

Connections from CASERTA (railway station)

Bus lines operated by AIR mobilità- Linee Provinciali Caserta (click here for timetables in Italian)

- **01-CE**, (around 50 minutes)
- **07-CE** (around 30 minutes)
- **05-CE** (around 40 minutes)

Bus line provided by A.T.C. Azienda Trasporti Campani Srl (click here for the timetable in Italian)

- **ATC Capua - Pier Delle Vigne** (around 35 mintes)

Connections from NAPLES (railway station and airport)

Bus line operated by AIR mobilità- Linee Provinciali Caserta

- **06-CE direction Capua - Piazza D'Armi** (approximately 1 hour).

The nearest stop to the Naples railway station is Corso Meridionale. A Capodichino airport stop is also available. The timetable in Italian can be found here

Bus line provided by A.T.C. Azienda Trasporti Campani Srl

- **ATC Capua - Pier Delle Vigne** (approximately 1 hour and 30 minutes)

The nearest stop to the Naples railway station is C.so Garibaldi - P.zza Principe Umberto. A Capodichino airport stop is also available. The timetable in Italian can be found here.

** Direct bus lines from ROME are not available**

Fares:

- For all bus lines from **Caserta to Capua** the fare is € 2.00 (single ride). An alternative integrated fare of € 2.40 (UNICO AC2) is also available if you need to use additional transportation within the Caserta-Capua areas (bus or metro). The integrated ticket is valid for 160 minutes.
- For all bus lines from **Naples to Capua** the fare is € 3.40 (single ride). An alternative integrated fare of € 4.30 (UNICO NA4) is also available if you need to use additional transportation within the Naples-Capua areas (bus or metro). The integrated ticket is valid for 160 minutes.

Purchasing tickets:

Bus tickets can be purchased from authorized retailers (newsstand, bars, tobacco shops, travel agencies). Integrated tickets can also be purchased in advance on the Unico Campania App available here.

🚗 By car

From NAPLES:

From the airport: Take highway A56 from via Salomone, at the fork follow signs towards Roma/Bari and merge onto highway A1/E45. Take the exit towards Santa Maria Capua Vetere, merge onto via Galatina/SP4 and, at the roundabout, follow signs for SS7. This road will take you to the center of Capua (via Napoli).

From the railway station: Take the road SS162dir from Via Emanuele Gianturco (signs for SS162 bis/Pomigliano d'Arco/Ottaviano) then take the exit onto A1/E45 towards Rome. Take the exit towards Santa Maria Capua Vetere, merge onto via Galatina/SP4 and, at the roundabout, follow signs for SS7. This road will take you to the center of Capua (via Napoli).

From CASERTA (railway station):

Take the road SS7 from Viale Vittorio Veneto. This road will take you to the center of Capua (exit via Napoli).

From ROME:

Follow the highway A1/E45 towards Napoli and take the exit towards Capua.

https://goo.gl/maps/n8yypqSH2nnUSooK6

Other Information

IES 2022 Social Dinner

The Social Dinner will take place in Caserta at 20.30, on Thursday January 27th.
Details about the place will be given online one week before the conference.
The cost of the Social Dinner is not included in the conference fees. Social Dinner tickets can be purchased at the registration desk subject to availability.

Structure of the Sessions

Plenary Session	35' minutes talk, 10' floor discussion.
Solicited Session (SS)	15' minutes talk, 5' floor discussion.
Contributed Session (SCL)	15' minutes talk, 5' floor discussion.

Coffee break and Lunch

Coffee breaks and lunches will take place in the first floor corridor in front of the room "Aula Magna" of the Conference venue.

Plenary sessions and SVQS Assembly

Plenary sessions and SVQS Assembly will take place in the room "Aula Magna" at first floor of the Conference venue.

Solicited and Contributed sessions

Solicited and Contributed sessions will take place in the rooms E, H, L (ground floor) M and Aula Magna (first floor) of the Conference venue.

Internet WI-FI

A free WI-FI connection is available at the Conference venue.

TAXI

If you need Taxis you can call it by Radiotaxi (phone): (+39) 0823322400 or (+39) 338 7484418 or (+39) 3297874563 or (+39) 320 341 6341

Thursday January, 27th

Conference Registration

Welcome Address and Plenary Session

Gianfranco Nicoletti – Rector of University of Campania "L. Vanvitelli"
Riccardo Macchioni – Pro-Rector of University of Campania "L. Vanvitelli"
Maria Ciocia - Head of the Economics Department
Luigi D'Ambra – Coordinator of SVQS Group
Corrado Crocetta – President of the Italian Statistical Society
Rosaria Lombardo – Chair of IES 2022 Programme Committee

Chair: **R. Lombardo**

PLENARY SESSION

Invited Speaker: **Michel van de Velden** – University Erasmus, Rotterdam

Title: **A general framework for implementing distance measures for categorical variables**

COFFEE BREAK

SS1 – Compositional Data Analysis
Organizer and Chair: **G. S. Monti**

Compositional Data and graph theory
C. Rieser and P. Filzmoser
Compositional deviations from linear and non-linear equilibria
J. J. Egozcue, V. Pawlowsky-Glahn and A. Buccianti
The knockoff filter for FDR control in robust ZeroSum regression in microbiome analysis
G. S. Monti and P. Filzmoser

SS2 - Monitoring progress towards SDGs: statistical approaches and methods for measuring poverty, inequalities and food insecurity
Organizer and Chair: **L. Secondi**

Poverty indicators adjusted using local price indexes
S. Marchetti, C. Giusti, M. Pratesi and L. Biggeri
Assessing the targeting of the anti-poverty measure "Reddito di Cittadinanza" using Small Area Estimation methods
G. Tonutti, G. Bertarelli, C. Giusti and M. Pratesi
Household consumption and food insecurity in Mexico: COVID19 and sustainable development
A. Vargas-Lòpez and L. Secondi

SCL1 – Big Data- Proximity data- Multi way data
Chair: D. Vicari

Forecasting Traffic Flows with Complex Seasonality using Mobile Phone Data
R. Metulini and M. Carpita
CP decomposition of 4th-order tensors of compositions
V. Simonacci, T. Menini and M. Gallo
A strategy of analysis of symmetry and skew-symmetry in asymmetric relationships
G. Bove

SCL2 – Industry and Society
Chair: **G. Scepi**

Toward an early detection of SME's default with websites' indicators
L. Crosato, J. Domenech and C. Liberati
Italians' Culture and Values after two years of pandemic
R. Angelone
Thematic evolution of Academic Medical Centers' research: a focus on Italian public owned AOUs in metropolitan areas
M. Aria, C. Cuccurullo, L. D'Aniello and M. Spano

SCL3 – Society and Tourism
Chair: **E. Zavarrone**

Local clustering coefficient to measure intra-regional tourism in Italy
R. Rondinelli, L. Palazzo and R. Ievoli
Challenges for the Post-Covid Tourism: the Perspective of Tourism Managers
E. Zavarrone, M. Friel and A. Forciniti
Sustainable tourism: The case of Albania
N. Firza
Threshold-based Naïve Bayes Classifier Customer Satisfaction evaluation
M. Romano, G. Zammarchi and C. Conversano

SCL4 – Society and Innovation
Chair: **M. Misuraca**

Migrant Integration Policy Index (MIPEX): an analysis of countries via Gaussian mixture model-based clustering
E. Seri, L. S. Alaimo, E. di Bella, R. Cataldo and A. Piscitelli
The measure of the BES: a proposal for the aggregation of the indicator education and training
L. Rossi and S. Daddi
Monitoring consumer sentiment using control charts
M. Marino, R. Mazza, M. Misuraca and A. Stavolo

SS3 – Statistical methods for the assessment of student careers in higher education.
Organizer and Chair: **M. P. Vitale**

Predicting university students' churn risk
M. La Rocca, M. Niglio and M. Restaino
Discovering archetypal universities in Italian higher education mobility flows
I. Primerano, F. Santelli and C. Usala
Measuring quality of students' careers in Higher Education: a systematic literature review
C. Cascella and G. Ragozzini
Estimating the peers effect on students' university choices
M. Porcu, I. Sulis and C. Usala

LUNCH BREAK

SS4 – Conformity assessment and quality predictions- itENBIS-
Organizer and Chair: **A. Vanacore**

Testing the predictive performance of multi-class classifiers
A. Vanacore, M. S. Pellegrino and A. Ciardiello
Optimal Subgrids from Spatial Monitoring Networks
R. Borgoni, Gilardi A. and D. Zappa
Extension of the JCGM 106:2012 - Conformity assessment of multicomponent items and finite statistical samples
F. Pennecchi and I. Kuselman

SS5 – Big Data and Large-dimensional Data
Organizer and Chair: **S. Mignani**

ROBOUT: a conditional outlier detection methodology for large-dimensional data
M. Farnè and A. Vouldis
Behaviours, emotions and opinions in modern citizen or customer relationship systems: a correct integration of small and big data for hyper-targeting, personal advertising and look-alike
F. Camillo
A model for assessing sea environmental quality
I. Camminatiello and A. Lucadamo

SS6 – Health Quality
Organizer and Chair: **P. Mariani**

The uneasiness index in a patient-designed quality of life questionnaire.
B. Bartolini, S. Bertoldi, L. Benedan, C. Galeone, P. Mariani, F. Sofia and M. Zenga.
Assessing the Quality of Life of patients with Epidermolysis Bullosa (EB): Development of a patient-centered questionnaire
L. Benedan, M. E. Hachem, C. Galeone, P. Mariani, C. Pilo and G. Tadini
Survival analysis in a business context: how to control the abandons of my subscribers
A. Marletta and M. Morandi

SCL5 – Assessing Performance
Chair: **C. Davino**

Political performance measuring and tracking through a system based on the Political Performance Indicator (Iep): Naples 2021 case
G. di Trapani
A class of case-mix adjusted probability-based indices for performance evaluation
G. E. Montanari and M. Doretti
An ultrametric model to build a Composite Indicators system
C. Cavicchia, P. Sarnacchiaro, M. Vichi and G. Zaccaria

14.45 – 16.00, room M –first floor

SCL6 – Statistical Learning
Chair: **M. Aria**

Feature definition for NBA result prediction through Deep Learning
M. Migliorati and E. Brentari
An application of contrast trees for mortality models diagnostic and boosting
S. Levantesi, M. Lizzi and A. Nigri
Twenty Years of Random Forest: preliminary results of systematic literature review
M. Aria, A. Gnasso and L. D'Aniello
A study on the GEV activation function for classification of class imbalance data
H. Park, J. Hong

14.45 – 16.00, room H –first floor

SCL7 – Society and Disparity
Chair: **P. Sarnacchiaro**

The gender gap in lifespan disparity as a social indicator of international countries: A fuzzy clustering analysis approach
L. S. Alaimo, P. D'Urso and A. Nigri
Modelling scale effects via a Bayesian approach: an application to decision making in public sector
M. Iannario and C. Tarantola
Board Gender Diversity and Social engagement: evidence from the banking industry
L. M. Daniele, F. Gangi and M. Coscia

14.45 – 16.00, room E –ground floor-

SCL8 – Education
Chair: **M. Bini**
Assessing heterogeneity in students' performance. The case of the Massive Open Online Courses
C. Davino and G. Lamberti
Assessing undergraduate students' perceptions of distance learning during the COVID-19 pandemic
I. Primerano, M. C. Catone, G. Giordano and M. P. Vitale

PhD satisfaction analysis in Italian University via Classification tree, Bagging and Random Forest
A.Crisci, A. Lucadamo and P. Amenta
Comparative Analysis of Student Learning: Technical, Methodological and Result Assessing of PISA-OECD and INVALSI-Italian Systems
S. Cervellera, C. Cusatelli and M. Giacalone

16.00 -17.00, room Aula Magna –first floor

SVQS member MEETING- "ASSEMBLEA del gruppo SVQS"

17.30 -18.30 Visit to "Museo Campano" Capua (to be confirmed)
20.30 -SOCIAL DINNER – CASERTA (to be confirmed)

Friday January, 28th

9.00 -10.00, room M –first floor-

SS7 – SEM with PLS: Theory and Applications
Organizer and Chair: **E. Ciavolino**

PLS-SEM basics and its potential applications:
A quick journey
J. Cheah and J. L. Roldan
A PLS-SEM confirmatory composite analysis for
football goalkeeper's performance validation
M. Cefis and M. Carpita
Text-mining and PLS-SEM combination to measure
food satisfaction with Google Review:
When the gut (re)counts!
P. Pasca, M. Misuraca, A. Meloni and E. Ciavolino

9.00 -10.00, room H –ground floor-

**SS8 – Applications of non standard statistical tools
to real-life**
Organizer and Chair: **A. D'Ambrosio**

A robust strategy for building a financial portfolio
C. Iorio and G. Pandolfo
Conditional copula a financial application
M. N. Ruscone and G. De Luca
Explaining Student Satisfaction Assessments: A Natural
Language Processing Approach
M. Ortu, L. Frigau and G. Contu

9.00 -10.00, room E –ground floor-

SS9 – Innovation and Value Co-creation in Society
Organizer and Chair: **A. De Chiara**

The smart working towards a Society 5.0
S. Mauro
Innovative interaction in Society 5.0: insights from
the cultural sector
E. Del Vacchio, F. Carignani, C. Laddaga and F. Bifulco
Society 5.0: a bibliometric analysis
A. D'Auria and A. De Chiara

10.00 -10.45, room Aula Magna –first floor

Chair: **M. Carpita**

PLENARY SESSION
Invited Speaker: Maurizio Vichi –University of
Rome "La Sapienza"

Title: **Strengthening the needs and quality of
statistics in Europe and Italy: the indications of
ESAC and COGIS**

10.45 -11.15, open corridor

COFFEE BREAK

11.15 -12.15, room M –first floor-

**SS10 – Statistical learning for mainstream press,
health and fiscal data**
Organizer and Chair: **C. Conversano**

The regression trunk model for partitioning
Italian municipalities based on their fiscal
capacities and its determinants
A. Baldassarre and D. Carullo
An analysis of Italian healthcare mobility
through a depth-based clustering procedure
G. Pandolfo and C. Iorio
Automatic Fake News Detection to Ensure
Quality of News Articles
Bonaventure F.P. Dossou and Adalbert F.X. Wilhelm

11.15 -12.15, room H –ground floor-

SS11 – Multi-way Methods for Evaluation Service
Organizer and Chair: **M. Gallo**

Multiple factor analysis with external information on
PISA survey data
V. Simonacci, M. Marino, M. G. Grassia and M. Gallo
A three-way analysis of well-being in Italy over time
L. Bocci and D. Vicari
Multiway approach for clustering time series with
time varying parameters
R. Cerqueti, R. Mattera and G. Scepi,

11.15 -12.15, room E –ground floor-

SS12 – Assessment of Management Quality
Organizer and Chair: **C. Fiondella**

Using partial triadic analysis for depicting the
temporal evolution of Italian private healthcare
organizations
A. Belfiore, C. Cuccurullo and M. Aria
The Relationship between Minority Directors and
Earnings Management: an empirical analysis in the
Italian institutional setting
P. Fera, N. Moscariello, M. Pizzo and G. Ricciardi

Management of the human factor into the company. An experience from the aeronautic sector.
L. Bollani, A. Celegato, F. Barbero and F. Fontemaggi

12.15 -13.15, room M –first floor-

SS13 – New technologies for students learning assessment and evaluation
Organizer and Chair: **A. Iodice D'Enza**

A non parametric cognitive diagnostic method in classroom assessment conditions
E. Themelis and A. Markos
Hybrid unfolding models to Likert-scale data to assess distance learning perception in higher education
M. Iannario, A. Iodice D'Enza and R. Romano
Classification of Statistics learners using multi-dimensional latent class IRT model and archetypal analysis: the ALEAS app
D. Pacella, R. Fabbricatore, C. Galluccio and F. Palumbo

12.15 -13.15, room H –ground floor-

SS14 – Labor Market and Enterprises
Organizer and Chair: **L. Masserini**

The effects of foreign ownership of business on Italian employment
A. Zeli, M. Bini and L. Nascia
Searching for new trends and dynamics in Labour Market: a statistical approach for the recruiting process
G. Maggioni, P. Mariani, A. Marletta and M. Zenga
A new definition of the professional figure Open Manager
P. Bruttini, P. Mariani, A. Marletta, L. Masserini and M. Zenga

12.15 -13.15, room E –ground floor-

SS15 – Statistical Approaches to Environmental Sustainability
Organizer and Chair: **A. Piscitelli**

Measuring sustainability as an emergent property of whole system dynamics
R. Aspinall
Tourism sustainability in the Italian regions: a fuzzy approach
L. S. Alaimo and G. Finocchiaro
How young people perceive environmental issues, react to ecological concerns and commit themselves to sustainable behaviours
A. M. D'Uggento

13.15 -14.15, open corridor

LUNCH BREAK

14.15 -15.15, room M –first floor-

SS16 – Statistical Methods for Environmental, Natural Resources and Health Assessment.
Organizer and Chair: **A. Pollice**

Spatial-ARFIMA models for the statistical analysis of environmental lattice processes
A. Ferretti, L. Ippoliti and P. Valentini
A Bayesian non parametric approach for bias correction for underreported data
S. Arima, G. Pasculli and S. Polettini
Assessment of the impact of anthropic pressures on the Giglio island meadow of Posidonia oceanica
G. J. Lasinio, G. Mastrantonio, A. Pollice, D. Ventura, G. Mancini and G. Ardizzone

14.15 -15.15, room H –ground floor-

SS17 – Functional Data Analysis Methodologies for Quality Assessment
Organizer and Chair: **E. Romano**

Improving the quality of questionnaires via the combined use of functional outlier detection and Item Response Theory
F. Fortuna, F. Maturo and T. Di Battista
Assessing government effectiveness over time: a functional data analysis approach
A. Naccarato, F. Fortuna and S. Terzi
Mining Distributed Acoustic Sensing data for vehicle traffic monitoring
Balzanella and R. Verde

14.15 -15.15, room E –ground floor-

SS18 – Evaluation and assessment of cognitive and learning processes
Organizer and Chair: **F. Palumbo**

Neuropsychological Assessment supported by Technology: the E-BTT case
M. Ponticorvo and T. Argiuolo
Introducing OpenAi-ES in Interactive Data. Clustering with R-EVOK
N. Milano and O. Gigliotta
Modeling heterogeneity in student's satisfaction during the Covid-19 pandemia
C. Davino, M. Gherghi, F. Palumbo and D. Vistocco

15.15 -16.15, room M –first floor-

SS19 – Substainability and Environment
Organizer and Chair: **I. Camminatiello**

Partitioning the Cressie-Read divergence statistic for three-way contingency tables: a study on environmental sustainability data.
R. Lombardo and E. J. Beh
Analysis of maximum precipitation in Thailand using non-stationary extreme value models
T. Prahadchai, J. Hong, P. Busababodhin and J-S Park
Assessing citizens' participation to urban transformation: a review of quantitative methods
M. Tregua and M. Scaglione

15.15 -16.15, room H –ground floor-

SS20 – Statistical methods for health and environmental impact assessment
Organizer and Chair: **F. Maturo**

Density estimation via Functional Data Analysis
S. A. Gattone and T. Di Battista
A new multivariate functional ANOVA approach for assessing air quality data amid COVID-19 pandemic
A. Evangelista, C. Acal, A. M. Aguilera, A. Sarra, T. Di Battista and S. Palermi
Conformal Prediction for Geographically Weighted Functional Regression models: an application for environmental impact assessment.
A. Diana, E. Romano and A. Irpino

15.15 -16.15, room E –ground floor-

SS21 – Local sustainability assessment: challenges in building quality indicators
Organizers and Chairs: **F. Fortuna and A. Naccarato**

Urban Sustainability Assessment: A Proposal for an Index Based on SDGs' Indicators
E. Grimaccia
Between and Within Country Inequality in Regional Well Being
P. Liberati and G. Resce
Equitable and sustainable well-being over time: a functional approach
T. Di Battista, E. Nissi and A. Sarra

15.15 -16.15, room L –ground floor-

SCL9 – Health and Covid-19
Chair: **P. Amenta**

Assessing the quality of a health service through the risk profile number (RPN)
C. Parretti, R. Tartaglia, G. Sbrana, M. Mandò and S. Pacchi
Twitter about COVID-19: An application of Structural Topic Models to a sample of Italian tweets
N. Cao, A. Calcagnì and L. Finos
The insurance premium structure for a covid-19 insurance policy
G. Di Lorenzo, G. Franchetti and M. Politano

16.15 -17.30, room M –first floor-

SS22 – Statistics, culture and tourism
Organizer and Chair: **M. Manisera**

Data science for Brescia: Arts and Cultural Places
M. Manisera, M. Carpita, P. Zuccolotto, M. Trentini, A. Piscopo and S. Karadjov
How data can influence the promotion and the consumption of cultural experience
P. Cristiani
Mobile phone data to monitor the impact of social and cultural events of Brescia
M. Carpita, M. Manisera and P. Zuccolotto
Analysing opinions on sustainable tourism in the Vallo di Diano area, Campania, Italy
S. Capecchi G. Quaranta and R. Salvia

16.15 -17.30, room H –ground floor-

SCL10– Time Series data, Panel data and Circular Economy
Chair: **A. D'Ambra**
Testing the Participation Gap Inclusion within the Wage Phillips Curve
D. Scaccabarozzi, D. Toninelli, D. Zurlo, F. Bacchini and R. Iannaccone
Multisource approach for trends evaluation. An application at the agricultural sector
D. Fusco, M. A. Liguori and V. Moretti
A permutation test on the relationship between Circular Economy and firm size
S. Bonnini and M. Borghesi
Circular economy and business models: a literature review
F. Izzo, S. Mele and V. Tomnyuk

16.15 -17.30, room E –ground floor-

SCL11 –Modelling Extreme Values –High dimensional time series data
Chair: **V. Simonacci**

Modeling extreme values using the r-largest four parameter distribution
Y. Shin, P. Busababodhin and J-S. Park
Classification of ECG signals based on functional data analysis and machine learning techniques
M. Sabri, F. Maturo, R. Verde, J. Riffi and A. E. Yahyaouy
Determining shape parameters in a climate multi-model ensemble
J-S. Park, Y. Shin, Y. Shin and J. Hong

17.30 -18.00, room Aula Magna –first floor-

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