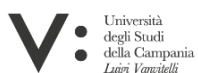




SIS | 2022

51st Scientific Meeting
of the Italian Statistical Society

Caserta, 22-24 June



Università
degli Studi
della Campania
Luigi Vanvitelli



Società
Italiana di
Statistica

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PROGRAMME

PROGRAMME		
	Wednesday, 22 June	Room
9:00-10:00	OPENING AND WELCOME	A2 + Aula Magna
10:00-10:45	Plenary Session 1 - chair: Laura Ventura <i>Causal inference in air pollution epidemiology</i> Francesca Dominici (<i>Harvard School of Public Health</i>)	A2 + Aula Magna
10:45-11:15	<i>Coffee break</i>	
11:15-12:45	Parallel Specialized Sessions 1	
11:15-12:45	SPE1 - Advances in Bayesian nonparametric methodology - chair: Raffaele Argiento	D2
	Repulsive mixture models for high-dimensional data <i>Lorenzo Ghilotti, Mario Beraha and Alessandra Guglielmi</i> Bayesian nonparametric mixtures of directed acyclic graph models <i>Federico Castelletti and Guido Consonni</i> Bayesian Clustering of Brain Regions via Extended Stochastic Block Models <i>Sirio Legramanti, Tommaso Rigon and Daniele Durante</i> discussant: <i>Laura D'Angelo</i>	

11:15-12:45	SPE2 - Data Science skills for next generation statisticians - chair: Paola Cerchiello	E2
	Cluster based oversampling for rimbanced learning <i>Gioia Di Credico and Nicola Torelli</i> Estimating the effect of remote teaching for university students through generalised linear mixed models <i>Silvia Bacci, Bruno Bertaccini, Simone Del Sarto, Leonardo Grilli and Carla Rampichini</i> Perceived stress across EU countries: does working from home impact? <i>Stefania Capeocchi, Francesca Di Iorio and Nunzia Nappo</i> discussant: <i>Paolo Pagnattoni</i>	
11:15-12:45	SPE3 - Non-parametric and semi-parametric multivariate models - chair: Enrico Ciavolino	F2
	"Fallacies" of PLS-SEM: An investigation <i>Christian M. Ringle and Marko Sarstedt</i> Combine text-mining and PLS-SEM to capture heterogeneity in food satisfaction across Italy: where the gut re(counts)! <i>Michelangelo Misuraca, Paola Pasca and Alessia Meloni</i> Negative Information, or how models see data: methodological issues and applications <i>Mario Angelelli</i> discussant: <i>Corrado Crocetta</i>	
11:15-12:45	SPE4 - Investigating effects of air pollution on health: a challenge for statisticians - chair: Francesca Dominici	Magna
	Investigating effect of air pollution on health via Spatial-Resolution Varying Coefficient Models <i>Garritt L. Page and Massimo Ventrucchi</i> A statistical framework for evaluating health effect of PM sources <i>Monica Pirani, Georges Bucyibaruta, Gary Fuller, David Green, Anja Tremper, Christina Mitsakou and Marta Blangiardo</i> Adjusting for unmeasured spatial confounding through shrinkage methods <i>Pasquale Valentini, Alexandra M. Schmidt, Carlo Zaccardi and Luigi Ippoliti</i> discussant: <i>Fedele Pasquale Greco</i>	
11:15-12:45	SIS GROUP Meeting - DIAS - Data, Indicators and Analyses for Sustainability chair: Filomena Maggino	A2
12:45-14:00	Lunch	
14:00-15:15	Parallel Solicited Sessions 1	
14:00-15:15	SOL1 - Bayesian nonparametric modelling and learning - chair: Marta Catalano	F2
	Nested Compound Random Measures <i>Riccardo Corradin</i> A regularized-entropy estimator to enhance cluster interpretability in Bayesian nonparametrics <i>Beatrice Franzolini and Giovanni Rebaudo</i> Exact confidence sets from credible sets with finite amounts of data <i>Bas J. K. Kleijn</i> Empirical Bayesian analysis of componentwise maxima in multivariate samples <i>Simone A. Padoan and Stefano Rizzelli</i>	
14:00-15:15	SOL2 - Processing of textual data in large corpora - chair: Germana Scepi	E2
	Predictive performance comparisons of different feature extraction methods in a financial column corpus <i>Andrea Sciandra and Riccardo Ferretti</i> Topics and trends in the End-of-Year addresses of the Presidents of the Italian Republic (1949-2021) <i>Matilde Trevisani and Arjuna Tuzzi</i> Thematic analysis on online education issues during COVID-19 <i>Valerio Basile, Michelangelo Misuraca and Maria Spano</i> What do we learn by applying multiple methods in topic detection? A comparative analysis on a large online dataset about mobility electrification <i>Fabrizio Alboni, Margherita Russo and Pasquale Pavone</i>	
14:00-15:15	SOL3 - Businesses in industry: new challenges in sustainability, innovation, performance and competitiveness - chair: Lisa Crosato	D2
	Estimation of gas price elasticities with hierarchical models <i>Luigi Grossi, Filippo Favero, Aldo Corbellini and Fabrizio Laurini</i> Multidimensional assessment of Eco-Innovation and its link with Marketing Innovations <i>Ida D'Attoma and Marco Ieva</i> SMEs Circular Economy practices in the European Union: Implications for sustainability <i>Nunzio Tritto, José G. Dias and Francesca Bassi</i> The employment effects of Italian Jobs Act. An ex-post impact evaluation <i>Alessandro Zeli and Leopoldo Nascia</i>	

14:00-15:15	SOL4 - Statistics for finance: new models, new data - chair: Giovanni De Luca	C2
	<p>The News-Jumps Relationship in the Cryptocurrency Market <i>Ahmet Faruk Aysan, Massimiliano Caporin, Oguzhan Cepni and Francesco Poli</i></p> <p>A weighted quantile approach to Expected Shortfall forecasting <i>Giuseppe Storti and Chao Wang</i></p> <p>Smooth and abrupt dynamics in financial volatility: the MS-MEM-MIDAS <i>Giampiero M. Gallo, Edoardo Otranto and Luca Scaffidi Domianello</i></p> <p>The tail index and related quantities for volatility models <i>Fabrizio Laurini</i></p>	
14:00-15:15	Guest Session - ENBIS - European Network for Business and Industrial Statistics chair: Rossella Berni	A2
	<p>Interpretability in functional clustering with an application to resistance spot welding process in the automotive industry <i>Christian Capezza, Fabio Centofanti, Antonio Lepore and Biagio Palumbo</i></p> <p>Covariate-adaptive design based on the simulated annealing <i>Marco Novelli, Alessandro Baldi Antognini and Maroussa Zagoraiou</i></p> <p>Statistical process monitoring of thermal images in additive manufacturing: a nonparametric solution for in-situ monitoring <i>Panagiotis Tsiamyrtzis, Marco Luigi Giuseppe Grasso and Bianca Maria Colosimo</i></p>	
14:00-15:15	Guest Session - IBS - International Biometric Society - Italian region - chair: Stefania Galimberti	Magna
	<p>Multiple arrows in the bayesian quiver: bayesian learning of partially directed structures from heterogeneous data <i>Luca La Rocca, Federico Castelletti, Stefano Peluso, Francesco Claudio Stingo and Guido Consonni</i></p> <p>Enhancing treatment effects evaluation in observational studies: a propensity score method based on Bayesian Networks <i>Paola Vicard, Paola M.V. Rancoita, Federica Cugnata, Alberto Briganti, Fulvia Mecatti, Clelia Di Serio and Pier Luigi Conti</i></p> <p>Ensemble inference in multiverse analysis <i>Livio Finos</i> discussant: <i>Luca Tardella</i></p>	
15:15-16:15	Parallel Contributed Sessions 1	
15:15-16:15	CON1 - Applications in Machine Learning - chair: Alessandro Bitetto	A2
	<p>A neural network approach to survival analysis with time-dependent covariates for modelling time to cardiovascular diseases in HIV patients <i>Federica Corso, Agostino Lurani Cernuschi, Laura Galli, Chiara Masci, Camilla Muccini, Anna Maria Paganoni and Francesca Ieva</i></p> <p>Application of Explainable Artificial Intelligence in the Cryptocurrency market <i>Golnoosh Babaei and Fatemeh Mojtahedi</i></p> <p>Analyzing the Correlation Structure of Financial Markets Using a Quantile Graphical Model <i>Beatrice Foroni, Luca Merlo and Lea Petrella</i></p> <p>Neural Network for statistical process control of a multiple stream binomial process with an application to HVAC systems in passenger rail vehicles <i>Gianluca Sposito, Antonio Lepore, Biagio Palumbo and Giuseppe Giannini</i></p> <p>Sparse signal extraction via variational SVM <i>Cristian Castiglione and Mauro Bernardi</i></p>	
15:15-16:15	CON2 - Bayesian modelling and inference 1 - chair: Alessandra Guglielmi	D2
	<p>Mapping Indicators on the Unit Interval: the tipsae Shiny App <i>Silvia De Nicolò and Aldo Gardini</i></p> <p>A Bayesian spatio-temporal model of PM10 pollutant in the Po Valley <i>Matteo Gianella, Alessandra Guglielmi and Giovanni Lonati</i></p> <p>Construction of a proper prior for a Bayesian envelope model <i>Andrea Mascaretti</i></p> <p>Hilbert principal component regression for bimodal bounded responses <i>Enea G. Bongiorno, Agnese M. Di Brisco, Aldo Goia and Sonia Migliorati</i></p>	

15:15-16:15	CON3 - Methods of causal inference - chair: Falco J. Bargagli Stoffi	C2
	<p>Bayesian causal mediation analysis through linear mixed-effect models <i>Chiara Di Maria, Antonino Abbruzzo and Gianfranco Lovison</i></p> <p>Bootstrap-aggregated adjustment set selection <i>Lorenzo Giammei</i></p> <p>Exploiting partial knowledge to evaluate the average causal effect via an ABC perspective <i>Giulia Cereda, Fabio Corradi and Cecilia Viscardi</i></p> <p>Intertemporal propensity score matching for casual inference: an application to covid-19 lockdowns and air pollution in Northern Italy <i>Daniele Bondonio and Paolo Chirico</i></p>	
15:15-16:15	CON4 - Methods for Spatio-temporal data - chair: Pierfrancesco Alaimo di Loro	F2
	<p>Spatial explorative analysis of thyroid cancer in Sicilian volcanic areas <i>Francesca Bitonti and Angelo Mazza</i></p> <p>Using geo-spatial topic modelling to understand the public view of Italian Twitter users: a climate change application <i>Yuri Calleo and Francesco Pilla</i></p> <p>DISTATIS-based spatio-temporal clustering approach: an application to business cycles' time series <i>Raffaele Mattera and Germana Scepi</i></p> <p>Bias correction of the maximum likelihood estimator for Emax model at the interim analysis <i>Caterina May and Chiara Tommasi</i></p>	
15:15-16:15	CON5 - Developments in composite indicators - chair: Maurizio Vichi	E2
	<p>Bayesian Networks for monitoring the gender gap <i>Flaminia Musella, Lorenzo Giammei, Silvana Romio, Fulvia Mecatti and Paola Vicard</i></p> <p>An Alternative Aggregation Function for the UNDP Human Development Index <i>Manuela Scioni and Paola Annoni</i></p> <p>An ultrametric model for building a composite indicator system to study climate change in European countries <i>Giorgia Zaccaria and Pasquale Sarnacchiaro</i></p> <p>Functional Weighted Malmquist Productive Index: a proposal for a dynamic composite indicator <i>Annalina Sarra, Eugenia Nissi and Tonio Di Battista</i></p> <p>CFA & PLS-PM for UX-AI Product infused <i>Emma Zavarrone and Rosanna Cataldo</i></p>	
15:15-16:15	CON6 - Fertility, adulthood and economic uncertainty - chair: Annalisa Busetta	C3
	<p>Uncertainty and fertility intentions: a comparison between the Great Recession and the Covid-19 crisis <i>Chiara Ludovica Comolli</i></p> <p>Interpreting the relationship between life course trajectories and explanatory factors. An example on the transition to adulthood <i>Danilo Bolano, Matthias Studer and Reto Burgin</i></p> <p>The relationship between economic news and fertility: the case of Germany <i>Maria Francesca Morabito, Raffaele Guetto, Matthias Vollbracht and Daniele Vignoli</i></p> <p>Leaving home among Millennials in Italy: does economic uncertainty matter? <i>Silvia Meggiolaro and Fausta Ongaro</i></p> <p>Adverse pregnancy outcomes in The United Kingdom following unexpected job loss <i>Alessandro Di Nallo and Selin Koksal</i></p>	
15:15-16:15	SIS GROUP Meeting - SDS - Statistics and Data Science chair: Nicola Torelli	Magna
16:15-16:45	Coffee break	
16:45-18:15	Parallel Specialized Sessions 2	
16:45-18:15	SPE5 - Explainable Artificial Intelligence methods - chair: Arianna Agosto	C2
	<p>A Time Series Approach to Explainability for Neural Nets with Applications to Risk-Management and Fraud Detection <i>Branka Hadji Misheva</i></p> <p>Oracle-LSTM: a neural network approach to mixed frequency time series prediction <i>Alessandro Bitetto and Paola Cerchiello</i></p> <p>Multidimensional Time Series Analysis via Bayesian Matrix Auto Regression <i>Alessandro Celani and Paolo Pagnottoni</i></p> <p>discussant: <i>Giada Adelfio</i></p>	

16:45-18:15	SPE6 - Advances in Classification and Data Analysis - chair: Francesca Greselin	D2
	Optimizing time slots in scientific meetings: a Latent Dirichlet allocation approach <i>Luca Frigau</i> Clustering artists based on the energy distributions of their songs on Spotify via the Common Atoms Model <i>Francesco Denti, Federico Camerlenghi, Michele Guindani and Antonietta Mira</i> Hidden markov models for four-way data <i>Salvatore D. Tomarchio, Antonio Punzo and Antonello Maruotti</i> discussant: <i>Leonardo Grilli</i>	
16:45-18:15	SPE7 - Family demography - chair: Silvia Meggiolaro	E2
	Does family of origin make the difference in occupational outcomes? <i>Annalisa Busetta, Elena Fabrizi, Isabella Sulis and Giancarlo Ragozini</i> Is there a cultural driver pushing Italian low fertility? <i>Francesca Luppi, Alessandro Rosina and Maria Rita Testa</i> Unpaid family work and the subjective well-being of Italian women during lockdown <i>Marina Zannella, Erica Aloé, Marcella Corsi and Alessandra De Rose</i> discussant: <i>Manuela Stranges</i>	
16:45-18:15	SPE8 - New Frontiers in the theory of composite indicators - chair: Enrico Di Bella	F2
	Methodological PLS-PM Framework for Model Based Composite Indicators <i>Rosanna Cataldo</i> Open issues in composite indicators construction <i>Leonardo Salvatore Alaimo</i> The posetic approach to the construction of socio-economic indicators: open issues and research opportunities <i>Marco Fattore</i> discussant: <i>Filomena Maggino</i>	
16:45-18:15	GROUP Meeting - SVQS - Evaluation of the Statistical Data Production in collaboration with the COGIS - Commissione per la Garanzia della Qualità dell'informazione Statistica - coordinator: Maurizio Carpita - president COGIS: Maurizio Vichi	Magna
16:45-18:15	SIS GROUP Meeting - GRASPA - Research Group for Statistical Applications to Environmental Problems chair: <i>Luigi Ippoliti</i>	G
18:15-19:15	Parallel Contributed Sessions 2	
18:15-19:15	CON7 - Bayesian modelling and inference 2 - chair: Isadora Antoniano	D2
	A Bayesian beta linear model to analyze fuzzy rating responses <i>Antonio Calcagni, Massimiliano Pastore, Gianmarco Altoe and Livio Finos</i> A Mixture Model for Multi-Source Cyber-Vulnerability Assessment <i>Mario Angelelli, Serena Arima and Christian Catalano</i> Hierarchical Bayesian models for analysing fish biomass data <i>Rita Fici, Antonino Abbruzzo, Luigi Augugliaro and Giacomo Milisenda</i> Insights into the derivative-based method for nonlinear mediation models <i>Claudio Rubino and Chiara Di Maria</i> An exploration of Approximate Bayesian Computation (ABC) and dissimilarities <i>Laura Bondi, Marco Bonetti and Raffaella Piccarreta</i>	
18:15-19:15	CON8 - Advances in Categorical and Preference data - chair: Eugenia Nissi	E2
	On the predictability of a class of ordinal data models <i>Rosaria Simone and Domenico Piccolo</i> Modelling multivariate ordinal data using graphical models <i>Camilla Caroni, Fabio Alberto Comazzi, Andrea Deretti and Federico Castelletti</i> Multinomial Thompson Sampling for adaptive experiments with rating scales <i>Nina Deliu</i> Ranking extraction in nested partially ordered data systems <i>Marco Fattore, Barbara Cavalletti, Matteo Corsi and Alessandro Avellone</i> Towards the definition of distance measures in the preference-approval structures <i>Alessandro Albano, Mariangela Sciandra and Antonella Plaia</i>	

18:15-19:15	CON9 - Covid-19 Assessment and Evaluation 1 - chair: Andrea Bucci	A2
	<p>Covid-19 impact assessment and inequality decomposition methods <i>Federico Attili and Michele Costa</i></p> <p>Multiversal methods for model selection: COVID-19 vaccine coverage and relative risk reduction <i>Venera Tomaselli and Giulio Giacomo Cantone</i></p> <p>The impact of vaccination rate on the spread of COVID-19 waves <i>Arianna Agosto and Paola Cerchiello</i></p> <p>Efficiency and feasibility of two stage sampling designs for estimating SARS-CoV-2 epidemic <i>Pietro Demetrio Falorsi, Vincenzo Nardelli and Giuseppe Arbia</i></p> <p>Evaluating the impacts of Covid-19 on the overall Italian death process via Functional Data Analysis <i>Riccardo Scimone, Alessandra Menafoglio, Laura M. Sangalli and Piercesare Secchi</i></p>	
18:15-19:15	CON10 - Developing countries, migration and migrants - chair: Thais Garcia-Pereiro	F2
	<p>Domestic violence in Africa: a glance through the DHS survey <i>Micaela Arcaio, Daria Mendola and Anna Maria Parroco</i></p> <p>Inequalities in undernutrition among Roma and non-Roma children in Western Balkans: an analysis of the determinants <i>Annalisa Busetta, Valeria Cetorelli and Chiara Puglisi</i></p> <p>The manual, communicative and quantitative abilities of native and foreign workers according to their level of education in Italy <i>Camilla Pangallo, Oliviero Casacchia and Corrado Polli</i></p> <p>HIV Prevalence in some African Territories: Socio-Economic Drivers <i>Micaela Arcaio, Daria Mendola and Anna Maria Parroco</i></p> <p>A longitudinal cross country comparison of migrant integration policies via Mixture of Matrix-Normals <i>Leonardo Salvatore Alaimo, Francesco Amato and Emiliano Seri</i></p>	
18:15-19:15	CON11 - Education and job placement - chair: Mariano Porcu	C2
	<p>Measuring happiness at work with categorical Principal Component Analysis <i>Ulpiana Kocollari, Maddalena Cavicchioli and Federica Demaria</i></p> <p>Proposal of indicators for the Education domain of the "Amisuradicomune" system <i>Monica Carbonara, Salvatore Cariello, Agata Maria Madia Carucci and Domenico Tebala</i></p> <p>Early and accurate: a Machine Learning approach to predict students' final outcome with registry data <i>Lidia Rossi, Marta Cannistrà and Tommaso Agasisti</i></p> <p>Students' experience with distance learning during Covid 19 pandemic in Southern Italy <i>Angela Maria D'Uggento and Nunziata Ribecco</i></p> <p>Covid-19 and financial professional advice <i>Marianna Brunetti and Rocco Ciciretti</i></p>	
18:15-19:15	CON12 - Time series methods and Applications - chair: Paolo Pagnotoni	C3
	<p>Trend and cycle decomposition in nonlinear time series <i>Maddalena Cavicchioli</i></p> <p>Asymptotic properties of the SETAR parameters: a new approach <i>Marcella Niglio and Guy Mélard</i></p> <p>Food prices forecast using post-sampled crowdsourced data with Reg-ARMA model: the case of Nigeria <i>Ilaria Lucrezia Amerise, Gloria Solano Hermosilla, Vincenzo Nardelli and Giuseppe Arbia</i></p> <p>Universal change point testing for dependent data <i>Federica Spoto, Alessia Caponera and Pierpaolo Brutti</i></p>	
19:30	Welcome Cocktail	

Thursday, 23 June

8:30-9:30	Parallel Contributed Sessions 3	
8:30-9:30	CON13 - Bayesian modelling and inference 3 - chair: Emanuele Aliverti	D2
	<p>A dynamic power prior approach to non-inferiority trials for normal means with unknown variance <i>Francesco Mariani, Fulvio De Santis and Stefania Gubbiotti</i></p> <p>Bayesian Change-Point Detection for a Brownian Motion with a Total Miss Criterion <i>Bruno Buonaguidi</i></p> <p>On the comparison of alternative Bayesian measures of posterior discrepancy <i>Fulvio De Santis and Stefania Gubbiotti</i></p> <p>A Bayesian Test for the comparison of two independent populations <i>Mara Manca, Silvia Columbu and Monica Musio</i></p> <p>A contribution to the i. j. savage problem <i>Francesco Bertolino, Silvia Columbu and Mara Manca</i></p>	
8:30-9:30	CON14 - Methods for Complex Data - chair: Francesco Palumbo	A2
	<p>Optimization of delayed rejection adaptive metropolis <i>Daniele Raffo and Antonietta Mira</i></p> <p>Dealing with multicollinearity and outliers in multinomial logit model: a simulation study <i>Ida Camminatiello and Antonio Lucadamo</i></p> <p>A tool to validate the assumptions on ratios of nearest neighbors' distances: the Consecutive Ratio Paths <i>Francesco Denti and Antonietta Mira</i></p> <p>Dimensionality reduction and visualization for interval-valued data via midpoints-ranges principal component analysis <i>Viviana Schisa, Alfonso Iodice D'Enza and Francesco Palumbo</i></p> <p>Data-driven design-based mapping of forest resources <i>Sara Franceschi, Rosa Maria Di Biase, Lorenzo Fattorini, Marzia Marcheselli and Caterina Pisani</i></p>	
8:30-9:30	CON15 - Environmental data and Climate change - chair: Pasquale Valentini	F2
	<p>Ensemble model output statistics for temperature forecasts in Veneto <i>Gaetan Carlo, Giummole Federica, Mameli Valentina and Siad Si Mokrane</i></p> <p>State of the urban Environment in Italy. A comparative analysis of selected composite indicators <i>Giuseppe Lecardane</i></p> <p>A Functional Data Analysis approach for Climate Model Selection : the case study of Campania Region <i>ViVeronica Villani, Elvira Romano and Paola Mercogliano</i></p> <p>Evolution of scientific literature on climate change: a bibliometric analysis <i>Gianpaolo Zammarchi, Giulia Contu and Maurizio Romano</i></p> <p>Energy and material demand of the Italian Regions <i>Flora Fullone, Giulia Iorio and Assunta Lisa Carulli</i></p>	
8:30-9:30	CON16 - Health and survivorship - chair: Manuela Stranges	C2
	<p>The role of health conditions in the relationship between socio-economic status and well-being: the counterfactual approach in mediation models <i>Sara Manzella and Margherita Silan</i></p> <p>Excess economic burden of multimorbidity: a population-based study in Italy <i>Chiara Seghieri, Niccolò Borri, Gaia Bertarelli and Sabina Nuti</i></p> <p>Depression-free life expectancy among 50 and older Americans by gender, race/ethnicity and education: the effect of marital disruption <i>Alessandro Feraldi and Cristina Giudici</i></p> <p>Disability-free grandparenthood in Italy. Trends and gender differences <i>Margherita Moretti, Elisa Cisotto and Alessandra De Rose</i></p>	
8:30-9:30	CON17 - Advances in regression models - chair: Antonella Rocca	E2
	<p>Semiparametric M-quantile regression for modelling georeferenced housing price data <i>Riccardo Borgoni, Antonella Carcagni, Alessandra Michelangeli, Nicola Salvati and Francesco Schirripa Spagnolo</i></p> <p>Resampling-based inference for high-dimensional regression <i>Anna Vesel, Jelle J. Goeman, Angela Andreella and Livio Finos</i></p> <p>Quantile regression coefficient modeling for counts to evaluate the productivity of university students <i>Viviana Carcaiso and Leonardo Grilli</i></p> <p>Adaptive smoothing spline using non-convex penalties <i>Daniele Cuntrera and Vito M.R. Muggeo</i></p> <p>Conditional tests for generalized linear models <i>Riccardo De Santis, Jelle J. Goeman, Anna Vesely and Livio Finos</i></p>	

8:30-9:30	CON18 - Methods and applications in economics and finance - chair: Francesca Giambona	C3
	Mixed models for anomaly detection in anti-money laundering aggregate reports <i>Stefano Iezzi and Marianna Siino</i> On the drivers of Greenwashing risk: evidence from Eurostoxx600 <i>Yana Kostiuk, Costanza Bosone and Paola Cerchiello</i> Modelling Financial Returns with Finite Mixtures of GED <i>Pierdomenico Dutillo and Stefano Antonio Gattone</i> Risk Parity strategy for portfolio construction: a kurtosis-based approach <i>Maria Debora Braga, Consuelo Rubina Nava and Maria Grazia Zoia</i> Fully reconciled probabilistic GDP forecasts from Income and Expenditure sides <i>Tommaso Di Fonzo and Daniele Girolimetto</i>	
9:30-10:15	Plenary Session 2 - chair: Stefano Campostrini <i>Clustering of Attribute and Network Data</i> Anuška Ferligoj (University of Ljubljana)	A2 + Aula Magna
10:15-11:00	Plenary Session 3 - chair: Raffaele Argiento <i>Bayesian approaches for capturing the heterogeneity of neuroimaging experiments</i> Michele Guindani (University of California Irvine)	A2 + Aula Magna
11:00-11:30	Coffee break	
11:30-13:00	Parallel Specialized Sessions 3	
11:30-13:00	SPE9 - Advances in complex sampling strategies - chair: Pier Luigi Conti	A2
	Random forest model-assisted estimation for finite population totals <i>Mehdi Dagdoug, Camelia Goga and David Haziza</i> Design-based consistency of the Horvitz-Thompson estimator in spatial sampling <i>Lorenzo Fattorini</i> The responsive-adaptive survey design approach for planning the permanent census of population and housing <i>Claudia De Vitiis, Stefano Falorsi, Alessio Guandalini, Francesca Inglese, Paolo Righi and Marco D. Terribili</i> discussant: <i>Enrico Fabrizi</i>	
11:30-13:00	SPE10 - Socio-demographic aspects of aging in Italy - chair: Giuseppe Gabrielli	D2
	Socio-economic and spatial stratification of frailty in the older population <i>Margherita Silan</i> Time allocation and wellbeing in later life: the case of Italy <i>Annalisa Donno and Maria Letizia Tanturri</i> The role played by migration and fertility on Italy's demographic aging trends: a provincial-level analysis <i>Thaís García-Pereiro and Anna Paterno</i> discussant: <i>Bruno Arpino</i>	
11:30-13:00	SPE11 - New challenges in the labour market - chair: Francesca Adele Giambona	E2
	Detecting changes and evolution in specialized professional figures: an application on the Italian IT & Digital sector <i>Andrea Marletta</i> How did the COVID-19 pandemic affect the genderpay gap in EU countries? <i>Antonella Rocca, Paolo Mazzocchi, Giovanni De Luca, Rosalia Castellano and Claudio Quintano</i> Skill Similarities and Dissimilarities in Online Job Vacancy Data across Italian Regions <i>Adham Kahlawi, Lucia Buzzigoli, Laura Grassini and Cristina Martelli</i> discussant: <i>Francesca Bassi</i>	
11:30-13:00	SPE12 - Small area estimation methods with socioeconomic applications - chair: Maria Rosaria Ferrante	F2
	Exploring Small Area Estimation techniques to address uncertainty in Spatial Price Indexes <i>Ilaria Benedetti and Federico Crescenzi</i> <i>Flexible small area estimation of theil index using mixture of Beta</i> <i>Silvia De Nicolò and Silvia Pacei</i> Inference for big data assisted by small area methods: an application to OBEC (on-line based enterprise characteristics) <i>Monica Pratesi, Francesco Schirripa Spagnolo, Gaia Bertarelli, Stefano Marchetti, Monica Scannapieco, Nicola Salvati and Donato Summa</i> discussant: <i>Gianni Betti</i>	
11:30-13:00	SIS GROUP Meeting - FutureSis <i>chair: Simone Di Zio</i>	Magna
13:00-14:15	Lunch	

14:15-15:30	Parallel Solicited Sessions 2	
14:15-15:30	SOL5 - Bayesian inference for complex random structures - chair: Federico Camerlenghi	B2
	<p>Bayesian nonparametric modeling of mortality curves via functional Dirichlet processes <i>Emanuele Aliverti and Bruno Scarpa</i></p> <p>Bayesian nonparametric clustering of spatially-referenced spike train data <i>Laura D'Angelo</i></p> <p>Towards an objective prior for Bayesian cluster analysis <i>Isadora Antoniano-Villalobos, Cristiano Villa and Sara Wade</i></p> <p>Bayesian Analysis of Mortality in Iceland via Locally Adaptive Splines <i>Federico Pavone and Sirio Legramanti</i></p>	
14:15-15:30	SOL6 - Advances in clustering - chair: Giorgia Zaccaria	D2
	<p>A Two-step Latent Class Approach with Measurement Invariance Testing <i>Zsuzsa Bakk, Roberto Di Mari, Jennifer Oser and Marc Hooghe</i></p> <p>Group-wise penalized estimation schemes in model-based clustering <i>Alessandro Casa, Andrea Cappozzo and Michael Fop</i></p> <p>Extending finite mixtures of latent trait analyzers for bipartite networks <i>Dalila Failli, Maria Francesca Marino and Francesca Martella</i></p> <p>A Fast Majorization-Minimization Algorithm for Convex Clustering <i>Daniel J.W. Touw, Patrick J.F. Groenen and Yu Terada</i></p>	
14:15-15:30	SOL7 - Statistical Methods for Complex Evolutionary Data - chair: Francesca Fortuna	E2
	<p>A FANOVA model with repeated measures for detecting patterns in biomechanical data <i>Ana M. Aguilera, Christian Acal and Manuel Escabias</i></p> <p>Modes of variation for Lorenz curves <i>Enea G. Bongiorno and Aldo Goia</i></p> <p>Analyzing textual data through Word Embedding: experiences in Istat <i>Mauro Bruno, Elena Catanese, Massimo De Cubellis, Fabrizio De Faustis, Francesco Pugliese, Monica Scannapieco and Luca Valentino</i></p> <p>Functional Horvitz-Thompson estimator for convex curves <i>Adelia Evangelista, Francesca Fortuna, Stefano Antonio Gattone and Tonio Di Battista</i></p>	
14:15-15:30	SOL8 - Children, parents, grandparents: a look on changing relationships chair: Anna Paterno	F2
	<p>Changes in social relationships of Italian older people. Evidence from FSS and SHARE Corona surveys <i>Elvira Pelle, Giulia Rivellini and Susanna Zaccarin</i></p> <p>Internet use and contacts with children among older Europeans <i>Bruno Arpino</i></p> <p>A time-based comparative approach to study the changing demography of grandparenthood in Italy <i>Elisa Cisotto, Eleonora Meli and Giulia Cavrini</i></p> <p>Carrying on the weight: Parental separation and children's Body Mass Index from childhood to young adulthood <i>Marco Tosi</i></p>	
14:15-15:30	SOL9 - Living conditions, well-being and poverty - chair: Francesco Maria Chelli	Magna
	<p>Analyzing the impact of COVID-19 pandemic on elderly population well-being <i>Gloria Polinesi, Mariateresa Ciommi and Chiara Gigliarano</i></p> <p>Exploring sustainable food purchasing behaviour using Italian scanner data <i>Ilaria Benedetti, Alessandro Brunetti, Federico Crescenzi and Luigi Palumbo</i></p> <p>The evaluation of heat vulnerability in Friuli-Venezia Giulia <i>Laura Pagani, Maria Chiara Zonarotti and Anja Habus</i></p> <p>Understanding School-to-Work Transition in Italy: First Results from a Newly Integrated Database <i>Stefano De Santis, Anita Guelfi, Valentina Talucci and Francesco Maria Truglia</i></p>	

14:15-15:15	Parallel Contributed Sessions 4	
14:15-15:15	CON19 - Latent Class models - chair: Leonardo Grilli	C3
	<p>Latent thresholds model in classification tasks <i>Giuseppe Mignemi, Andrea Spoto and Antonio Calcagni</i></p> <p>Adaptive filters for time-varying correlation parameters <i>Michele Lambardi di San Miniato, Ruggero Bellio, Luca Grassetto and Paolo Vidoni</i></p> <p>Bayesian structural learning for Latent Class Model with an application to Record Linkage <i>Davide Di Cecco</i></p> <p>Multilevel Latent Class modelling to advise students in self-learning platforms: an application in the context of learning Statistics <i>Roberto Fabbricatore, Zsuzsa Bakk, Roberto Di Mari, Mark de Rooij and Francesco Palumbo</i></p> <p>Latent Markov models with associated mixed responses <i>Alfonso Russo and Alessio Farcomeni</i></p>	
14:15-15:15	CON20 - Methods for health studies - chair: Sara Fontanella	C2
	<p>Beyond the fragility index <i>Piero Quatto and Enrico Ripamonti</i></p> <p>Evaluation of the diagnostic-therapeutic paths for schizophrenic patients through state sequences analysis <i>Laura Savaré, Giovanni Corrao and Francesca Ieva</i></p> <p>Optimal timing of bone-marrow transplant in myelodysplastic syndromes through multi-state modeling and microsimulation <i>Caterina Gregorio, Marta Spreafico and Francesca Ieva</i></p> <p>A fully Bayesian approach for sample size determination of Poisson clinical trials <i>Susanna Gentile and Valeria Sambucini</i></p> <p>Compartmental models in epidemiology: Application on Smoking Habits in Tuscany <i>Alessio Lachi, Cecilia Viscardi, Maria Chiara Malevolti, Giulia Carreras and Michela Baccini</i></p>	
15:30-16:15	Plenary Session 4 - chair: Sabrina Giordano <i>Historical Overview of Textbook Presentations of Statistical Science</i> Alan Agresti (University of Florida)	B2 + Aula Magna
16:15-16:45	Coffee break	
16:45-18:00	Awards - chair: Domenico Piccolo - Young Scholars for Contributions to Statistical Disciplines - Best Ph.D. Thesis - Y-SIS, Best contribution presented at the conference SIS2022	E2
16:45-18:00	GROUP Meeting - SVQS - On the ANVUR system for Self-evaluation, Periodic evaluation and Accreditation (AVA) coordinator: Maurizio Carpita - coordinator SVQS-AVA: Salvatore Ingrassia	Magna
18:00-19:15	SIS Assembly	A2
21:00	Social Dinner	

Friday, 24 June

9:00-10:15	Parallel Solicited Sessions 3	
9:00-10:15	SOL10 - Data Science for Functional and Complex Data - chair: Simone Vantini	A2
	<p>A parsimonious approach to representing functional <i>Enea G. Bongiorno and Aldo Goia</i></p> <p>Functional Regression Models with Interpretable Sparse Structure <i>Mauro Bernardi and Marco Stefanucci</i></p> <p>COVID-19 in Italy: characterizing the shapes of epidemic waves through Functional Data Analysis <i>Marzia A. Cremona, Tobia Boschi, Jacopo Di Iorio, Lorenzo Testa and Francesca Chiaromonte</i></p> <p>Mixed-effects high-dimensional multivariate regression via group-lasso regularization <i>Francesca Ieva, Andrea Cappozzo and Giovanni Fiorito</i></p>	
9:00-10:15	SOL11 - The integration of immigrants in Italy: a multidimensional perspective chair: Raffaele Guetto	E2
	<p>Albanian, Romanian and Italian women's fertility intentions: a comparative perspective among migrants, stayers and natives <i>Thaís García-Pereiro and Anna Paterno</i></p> <p>Does self-employment in the origin-country affect self-employment after migration? Evidence from Italy and Spain <i>Floriane Bolazzi and Ivana Fellini</i></p> <p>The impact of integration on immigrants' health behaviours in Italy <i>Giovanni Minchio, Raffaella Rusciani and Teresa Spadea</i></p> <p>Migration, gender, and the distribution of paid and unpaid labour. Preliminary perspectives on foreign couples in Italy <i>Rocco Molinari, Agnese Vitali and Ester Gallo</i></p>	
9:00-10:15	SOL12 - Sampling techniques for big data analysis - chair: Daniela Marella	F2
	<p>Non-probability samples and big data: how to use them? <i>Pier Luigi Conti</i></p> <p>Combining Big Data with probability survey data: a comparison of methodologies for estimation from non-probability surveys <i>Maria Del Mar Rueda, Ramon Ferri-García and Luis Castro-Martín</i></p> <p>A Bayesian approach for combining probability and non-probability samples surveys <i>Silvia Biffignandi, Camilla Salvatore, Joseph Sakshaug, Bella Struminskaya and Arkadiusz Wisniowski</i></p> <p>Big data and Official Statistics: some evidences <i>Paolo Righi, Natalia Golini and Gianpiero Bianchi</i></p>	
9:00-10:15	SOL13 - The analysis of students performance and behaviour based on large databases - chair: Giancarlo Ragozini	Magna
	<p>Students enrolled in STEM discipline in Italy: patterns of retention, dropout and switch <i>Valentina Tocchioni, Carla Galluccio, Maria Francesca Morabito and Alessandra Petrucci</i></p> <p>Estimating peers effect in university students' dropout decisions <i>Mariano Porcu, Isabella Sulis and Cristian Usala</i></p> <p>The routes of Southern Italy University students: an explorative analysis <i>Gabriele Ruiu and Vincenzo Giuseppe Genova</i></p> <p>A new bipartite matching approach for record linkage: the case of two big Italian databases <i>Martina Vittorietti, Andrea Priulla, Vincenzo Giuseppe Genova, Giovanni Boscaino and Ornella Giambalvo</i></p>	
9:00-10:00	Parallel Contributed Sessions 5	
9:00-10:00	CON21 - Covid-19 Assessment and Evaluation 2 - chair: Giulia Cavrini	C2
	<p>We are in the same storm but not in the same boat: Impact of COVID-19 on UK households <i>Demetrio Panarello and Giorgio Tassinari</i></p> <p>A network approach to investigate learning experiences and social support in higher education <i>Iaria Primerano, Maria Carmela Catone, Giuseppe Giordano and Maria Prosperina Vitale</i></p> <p>Physical and cultural activity, internet use and anxiety of Italian university students during the pandemic <i>Giovanni Busetta, Maria Gabriella Campolo and Demetrio Panarello</i></p> <p>The digital divide in Italy before and during the pandemic phase <i>Laura Zannella</i></p>	

9:00-10:00	CON22 - Bayesian modelling and inference 4 - chair: Lenoardo Egidi	D2
	<p>Bayesian functional mixed effects model for sports data <i>Patric Dolmeta, Raffaele Argiento and Silvia Montagna</i></p> <p>Bayesian Optimization with Machine Learning for Big Data Applications in the Cloud <i>Bruno Guindani, Danilo Ardagna and Alessandra Guglielmi</i></p> <p>Linear models with assumptions-free residuals: a Bayesian Nonparametric approach <i>Filippo Ascolani, Antonio Lijoi and Igor Prunster</i></p> <p>Confidence distributions and fusion inference for intractable likelihoods <i>Elena Bortolato and Laura Ventura</i></p> <p>Wasserstein distance and applications to Bayesian nonparametrics <i>Marta Catalano, Hugo Lavenant, Antonio Lijoi and Igor Prunster</i></p>	
9:00-10:00	CON23 - Network Analysis and community detection - chair: Elvira Romano	C3
	<p>Community detection in networks: a heuristic version of Girvan Newman algorithm <i>Iliaria Bombelli and Lorenzo Di Rocco</i></p> <p>Geographically weighted regression for spatial network data: an application to traffic volumes estimation <i>Andrea Gilardi, Riccardo Borgoni and Jorge Mateu</i></p> <p>Asymmetric Spectral Clustering: a comparison between symmetrizations <i>Cinzia Di Nuzzo and Donatella Vicari</i></p> <p>Community detection of seismic point processes <i>Valeria Policastro, Nicoletta D'Angelo and Giada Adelfio</i></p> <p>An Explorative analysis of Different Distance Metrics to Compare Unweighted Undirected Networks <i>Anna Simonetto, Matteo Ventura and Gianni Gilioli</i></p>	
10:15-11:15	Parallel Contributed Sessions 6	
10:15-11:15	CON24 - Gender, attitudes and family ties - chair: Rocco Molinari	D2
	<p>Parents of a disabled child in Italy: less healthy but more civically engaged <i>Nicoletta Balbo and Danilo Bolano</i></p> <p>Searching the nexus between women's empowerment and female genital cutting (FGC) <i>Patrizia Farina, Liva Ortensi, Thomas Pettinato and Enrico Ripamonti</i></p> <p>Social stratification, gender, and attitudes towards voluntary childlessness in Europe: A double machine learning approach <i>Danilo Bolano and Francesco C. Billari</i></p> <p>Integrating structuralism and diffusionism to explain the new Italian emigration <i>Francesca Bitonti</i></p> <p>On the effects of rooted family ties in business networks: The South of Italy in the 19th century <i>Roberto Rondinelli, Giancarlo Ragozini and Maria Carmela Schisani</i></p>	
10:15-11:15	CON25 - Methods and Applications in Clustering - chair: Carla Rampichini	A2
	<p>A semi-supervised clustering method to extract information from the electronic Word Of Mouth <i>Giulia Contu, Luca Frigau, Maurizio Romano and Marco Ortu</i></p> <p>Spectral approach for clustering three-way data <i>Cinzia Di Nuzzo and Salvatore Ingrassia</i></p> <p>Double clustering with a matrix-variate regression model: finding groups of athletes and disciplines in decathlon's data <i>Mattia Stival, Mauro Bernardi, Manuela Cattelan and Petros Dellaportas</i></p> <p>Classification of the population dynamics <i>Federico Bacchi and Laura Neri</i></p> <p>Locating γ-Ray Sources on the Celestial Sphere via Modal Clustering <i>Anna Montin, Alessandra R. Brazzale and Giovanna Menardi</i></p>	
10:15-11:15	CON26 - Sampling and Official Statistics - chair: Sara Franceschi	E2
	<p>Fisher's Noncentral Hypergeometric Distribution for Population Size Estimation <i>Veronica Ballerini and Brunero Liseo</i></p> <p>Small area models for skew and kurtotic distributions <i>Maria Rosaria Ferrante and Lorenzo Mori</i></p> <p>The use of remotely sensed data in sampling designs for forest monitoring <i>Chiara Bocci, Gherardo Chirici, Giovanni D'Amico, Saverio Francini and Emilia Rocco</i></p> <p>Analyzing different causes of one-inflation in capture recapture models for criminal populations <i>Davide Di Cecco, Andrea Tancredi and Tiziana Tuoto</i></p> <p>Administrative database and official statistics: an IT and statistical procedure <i>Caterina Marini and Vittorio Nicolardi</i></p>	

10:15-11:15	CON27 - Spatial modeling and Analyses - chair: Marzia Marcheselli	F2
	<p>Spatial statistics analysis using microdata: an application at agricultural sector <i>Daniela Fusco, Maria Antonietta Liguori, Valerio Moretti and Francesco Giovanni Truglia</i></p> <p>Bayesian spatial modeling of extreme precipitation <i>Federica Stolf</i></p> <p>A proposal to adjust local Moran's I for measuring residential segregation <i>Antonio De Falco and Antonio Irpino</i></p> <p>Accurate directional inference for gaussian graphical models <i>Claudia Di Caterina, Nancy Reid and Nicola Sartori</i></p> <p>Depopulation and population ageing in italian territories <i>Cecilia Reynaud and Sara Miccoli</i></p>	
10:15-11:15	CON28 - Advances in Classification - chair: Mariateresa Ciommi	C3
	<p>Measures of interrater agreement based on the standard deviation <i>Giuseppe Bove</i></p> <p>A Comparison of accuracy measures for Classification tasks <i>Amalia Vanacore and Maria Sole Pellegrino</i></p> <p>Iterative Threshold-based Naive Bayes Classifier: an efficient Tb-NB improvement <i>Maurizio Romano, Gianpaolo Zammarchi and Giulia Contu</i></p> <p>Reprogramming FairGANs with Variational Auto-Encoders: A New Transfer Learning Model <i>Beatrice Nobile, Gabriele Santin, Bruno Lepri and Pierpaolo Brutti</i></p>	
10:15-11:15	CON29 - Robust statistics - chair: Paolo Giudici	C2
	<p>Combinatorial Analysis of Factorial Designs with Ordered Factors <i>Roberto Fontana and Fabio Rapallo</i></p> <p>Robustifying the Rasch model with the forward search <i>Anna Comotti and Francesca Greselin</i></p> <p>A novel estimation procedure for robust CP model fitting <i>Valentin Todorov, Violetta Simonacci, Michele Gallo and Nikolay Trendafilov</i></p> <p>A robust approach for functional ANOVA with application to additive manufacturing <i>Fabio Centofanti, Bianca Maria Colosimo, Marco Luigi Grasso, Alessandra Menafoglio, Biagio Palumbo and Simone Vantini</i></p> <p>Modeling unconditional M-quantiles in a regression framework <i>Luca Merlo, Lea Petrella and Nicola Salvati</i></p>	
10:15-11:15	CON30 - Model-based clustering - chair: Gabriella Campolo	Magna
	<p>Bayesian mixtures of semi-Markov models <i>Rosario Barone and Andrea Tancredi</i></p> <p>Specification of informative priors for capture-recapture finite mixture models <i>Pierfrancesco Alaimo Di Loro, Gianmarco Caruso, Marco Mingione, Giovanna Jona Lasinio and Luca Tardella</i></p> <p>Clustering multivariate categorical data: a graphical model-based approach <i>Francesco Rettore, Michele Russo, Luca Zerman and Federico Castelletti</i></p> <p>The Gaussian mixture model-based clustering for the comparative analysis of the Healthcare Digitalization Index in the Italian local health authorities <i>Margaret Antonicelli, Michele Rubino and Filomena Maggino</i></p> <p>Local Spatio-Temporal Log-Gaussian Cox Processes for seismic data analysis <i>Nicoletta D'Angelo, Giada Adelfio and Jorge Mateu</i></p>	
11:15-11:45	Coffee break	
11:45-13:15	Parallel Specialized Sessions 4	
11:45-13:15	SPE13 - Statistical methods and models for Sports Analytics - chair: Marica Manisera	F2
	<p>The 'hot shoe' in soccer penalty shootouts <i>Andreas Groll and Marius Otting</i></p> <p>G-RAPM: revisiting player contributions in regularized adjusted plus-minus models for basketball analytics <i>Luca Grassetti</i></p> <p>Formative vs Reflective constructs: a CTA-PLS approach on a goalkeepers' performance model <i>Mattia Cefis and Eugenio Brentari</i> discussant: <i>Leonardo Egidi</i></p>	

11:45-13:15	SPE14 - Integrating available Data Sources for Official Statistics - chair: Elena Grimaccia	C2
	The Use of Administrative Data for the Estimation of Italian Usually Resident Population <i>Marco Caputi, Giampaolo De Matteis, Gerardo Gallo and Donatella Zindato</i> Statistical Architecture for Register Based Population Size Estimation: A Proposal <i>Fabrizio Solari, Antonella Bernardini, Angela Chieppa and Nicoletta Cibella</i> Robust approaches to dealing with linkage error when analysing survey data <i>Raymond Chambers</i> <i>discussant: Monica Pratesi</i>	
11:45-13:15	SPE15 - New frontiers for the analysis of the territorial economic phenomena chair: Rosalia Castellano	Magna
	An empirical tool to classify industries by regional concentration and spatial polarization <i>Diego Giuliani, Maria Michela Dickson, Flavio Santi and Giuseppe Espà</i> Comparing non-compensatory composite indicators: a case study based on SDG for Mediterranean countries <i>Francesca Mariani, Mariateresa Ciommi, Maria Cristina Recchioni, Giuseppe Riccardo Lamonica and Francesco Maria Chelli</i> Evaluating the determinants of innovation from a spatio-temporal perspective. The GWPR approach <i>Gaetano Musella, Giorgia Riviaccio and Emma Bruno</i> <i>discussant: Luca Salvati</i>	
11:45-13:15	SPE16 - Dimension Reduction for complex data - chair: Rosaria Lombardo	D2
	Discrimination and clustering via principal components <i>Nikolay Trendafilov and Violetta Simonacci</i> Exploratory graph analysis for configural invariance assessment <i>Sara Fontanella, Alex Cucco and Nicola Pronello</i> Penalized likelihood factor analysis <i>Kei Hirose</i> <i>discussant: Valentin Todorov</i>	
11:45-13:15	Guest Session - SIFS - Italian Society of Statistical Physics chair: Eugenio Lippiello Statistical Physics in Italy <i>Roberto Livi (President of the SIFS)</i> Statistical physics of networks <i>Guido Caldarelli</i> Modelling of financial time series <i>Fabrizio Lillo</i>	E2
11:45-13:15	Meeting among Coordinators/Responsibles of Bachelor's or Master's degree programs in Statistics, Demography and Data Science	A2
13:15-14:15	Lunch	
14:15-15:15	Parallel Contributed Sessions 7	
14:15-15:15	CON31 - Student performance evaluation - chair: Giulia Rivellini	D2
	Rasch model versus Rasch Mixture model: strengthens and limits in identifying factors affecting students' performance in mathematics <i>Clelia Cascella</i> Does taking additional Maths classes improve university performance? <i>Martina Vittorietti, Andrea Priulla and Massimo Attanasio</i> University dropout and churn in Italy: an analysis over time <i>Barbara Barbieri, Mariano Porcu, Luisa Salaris, Isabella Sulis, Nicola Tedesco and Cristian Usala</i> The ANOGEI for detecting the impact of education and employment on income inequality <i>Elena Fabrizi, Alessio Guandalini and Alessandra Spagnoli</i> What causes juvenile crime? a case-control study <i>Elena Dalla Chiara and Federico Perali</i>	
14:15-15:15	CON32 - Methods and Applications in Survival analysis - chair: Gaetano Musella	C2
	Family history in survival and disease development <i>Maria Veronica Vinattieri and Marco Bonetti</i> Recursive partitioning for survival data <i>Ambra Macis</i> Detecting survival patterns in a digital learning platform <i>Marta Cannistrà, Mara Soncin, Federico Frattini</i> An extension of proper Bayesian bootstrap ensemble tree models to survival analysis <i>Elena Ballante</i> Modelling time to university dropout by means of time-dependent frailty COX PH models <i>Mirko Giovio, Paola Mussida and Chiara Masci</i>	

14:15-15:15	CON33 - Text mining - chair: Michangelo Misuraca	E2
	<p>Topics & metaverse: an explorative analysis <i>Emma Zavarrone, Alessia Forciniti and Emanuele Parisi</i></p> <p>Applying Topic Models to bibliographic search: some results in basketball domain <i>Manlio Migliorati and Eugenio Brentari</i></p> <p>Exploiting Text Mining and Network Analysis for future scenarios development: an application on remote working <i>Yuri Calleo, Simone Di Zio and Vanessa Russo</i></p> <p>Emotion recognition in Italian political language to predict positionings and crises government <i>Alessia Forciniti and Emma Zavarrone</i></p> <p>What does your self-description reveal about you? <i>Riccardo Ricciardi</i></p>	
14:15-15:15	CON34 - Variable selection and complete matrix approaches - chair: Michele Gallo	F2
	<p>A Statistical Approach for the Completion of Input-Output Tables <i>Rodolfo Metulini, Giorgio Gnecco, Francesco Biancalani and Massimo Riccaboni</i></p> <p>On multivariate records over sequences of random vectors with Marshall-Olkin dependence of components <i>Amir Khorrami Chokami and Simone A. Padoan</i></p> <p>The joint censored Gaussian graphical lasso model <i>Gianluca Sottile, Luigi Augugliaro and Veronica Vinciotti</i></p> <p>Variable selection with unbiased estimation: the cdf penalty <i>Daniele Cuntrera, Vito M.R. Muggeo and Luigi Augugliaro</i></p> <p>Automatic variable selection for MIDAS regressions: an application <i>Consuelo Rubina Nava, Luigi Riso and Maria Grazia Zoia</i></p>	
14:15-15:15	CON35 - Distribution Theory and Estimation - chair: Serena Arima	C3
	<p>A general framework for unit distributions <i>Francesca Condino, Filippo Domma and Bozidar V. Popovic</i></p> <p>Prediction intervals based on multiplicative model combinations <i>Valentina Mameli and Paolo Vidoni</i></p> <p>Some advances on pairwise likelihood estimation in ordinal data latent variable models <i>Giuseppe Alfonzetti and Ruggero Bellio</i></p> <p>The logratio student t distribution <i>Gianna Serafina Monti and Glòria Mateu-Figueras</i></p>	
14:15-15:15	CON36 - Functional Data Analysis - chair: Marco Stefanucci	Magna
	<p>Nonparametric functional prediction bands: theory with an application to bike sharing mobility demand in the city of Milan <i>Jacopo Diquigiovanni, Matteo Fontana and Simone Vantini</i></p> <p>An R package for the statistical process monitoring of functional data <i>Christian Capezza, Fabio Centofanti, Antonio Lepore, Alessandra Menafoglio, Biagio Palumbo and Simone Vantini</i></p> <p>Trend filtering for functional regression <i>Federico Ferraccioli, Alessandro Casa and Marco Stefanucci</i></p> <p>Conformal prediction for spatio-functional regression models <i>Andrea Diana, Elvira Romano and Antonio Irpino</i></p>	
15:15-16:30	Parallel Solicited Sessions 4	
15:15-16:30	SOL14 - Statistical Methods for Science Mapping - chair: Massimo Aria	Magna
	<p>A word embedding strategy to study the thematic evolution of ageing and healthcare expenditure growth literature <i>Milena Lopreite, Michelangelo Misuraca and Michelangelo Puliga</i></p> <p>An automatic approach for bibliographical co-words networks labelling <i>Manuel J. Cobo and Maria Spano</i></p> <p>Characterising research areas in the field of AI <i>Alessandra Belfiore, Angelo Salatino and Francesco Osborne</i></p> <p>Mapping evolutionary paths of a society: the longitudinal analysis of the Italian Economia Aziendale <i>Corrado Cuccurullo, Luca D'Aniello and Michele Pizzo</i></p>	

15:15-16:30	SOL15 - Methodological Challenges in Policy Evaluation - chair: Marusca De Castris	C2
	<p>Bayesian principal stratification with longitudinal data and truncation by death <i>Giulio Grossi, Marco Mariani, Alessandra Mattei and Fabrizia Mealli</i></p> <p>Optimal Policy Learning: implementing statistical learning to maximize policy impact <i>Giovanni Cerulli, Federico Brogi, Fabrizio De Fausti and Barbara Guardabascio</i></p> <p>Place-Based Policies and the location of economic activity: Evidence from the Italian Strategy for Inner Areas <i>Giuliano Resce, Gianluca Monturano and Marco Ventura</i></p> <p>Is the EIB Delivering On Economic Convergence? <i>Carlo D'Ippoliti and Roberta Di Stefano</i></p>	
15:15-16:30	SOL16 - Modelling complex structures in ecological data - chair: Giovanna Jona Lasinio	F2
	<p>New insights on the ecology and conservation of Mediterranean sharks through the development of Citizen Science networks and new modeling approaches <i>Stefano Moro, Francesco Ferretti and Francesco Colloca</i></p> <p>An overdispersed Poisson model for forest fires occurrences in Southern Italian municipalities <i>Crescenza Calculli and Serena Arima</i></p> <p>Assessment of the impact of anthropic pressures on the Giglio island meadow of Posidonia oceanica <i>Gianluca Mastrantonio, Daniele Ventura, Gianluca Mancini and Giandomenico Ardizzone</i></p> <p>Accounting for observation processes in spatio-temporal ecological data <i>Janine Illian</i></p>	
15:15-16:30	SOL17 - Statistics and indicators for the recovery and resilience plan - chair: Alessandra Righi	D2
	<p>The prominence of statistical information for the monitoring and effective implementation of the NRRP <i>Andrea Petrella</i></p> <p>Estimate the impact of the PNRR using the macroeconomic model for Italy (MeMo-It) <i>Fabio Bacchini, Davide Zurlo, Roberto Golinelli</i></p> <p>Big Data Analytics in mobile cellular networks as enabler for innovative statistics to evaluate the effects of Recovery and Resilience Plan actions <i>Andrea Zaramella, Dario Di Sorte, Denis Cappellari and Bruno Zamengo</i></p> <p>Measuring the digital transition within the PA: proposals comparison <i>Susanna Traversa and Enrico Ivaldi</i></p>	
15:15-16:15	Parallel Contributed Sessions 8	
15:15-16:15	CON37 - Tourism and sport studies - chair: Pasquale Sarnacchiaro	C3
	<p>Assessing satisfaction of tourists visiting Italian museums: evidence from the eWOM <i>Daria Mendola and Valentina Oddo</i></p> <p>COVID-19 pandemic and tourism demand: a comparison between Spain and Italy <i>Caterina Sciortino, Ludovica Venturella and Stefano De Cantis</i></p> <p>A compositional analysis of tourism in Europe <i>Francesco Porro</i></p> <p>Improving administrative data quality on tourism using Big Data <i>Antonella Bianchino, Armando d'Aniello and Daniela Fusco</i></p>	
15:15-16:15	CON38 - Geographical variations of socio-demographic issues - chair: Ida Camminatiello	C2
	<p>Elderly HCE and health care need: comparing spatially unexplained levels <i>Irene Torrini, Laura Rizzi and Luca Grassetti</i></p> <p>Measuring sustainable development at the regional level. The case of Italy <i>Marianna Bartiromo and Enrico Ivaldi</i></p> <p>Socio-economic deprivation and COVID-19 infection: a Bayesian spatial modelling approach <i>Antonino Abbruzzo, Andrea Mattaliano, Alessandro Arrigo, Salvatore Scondotto and Mauro Ferrante</i></p> <p>Comparing local structures of spatio-temporal point processes on linear networks <i>Nicoletta D'Angelo, Giada Adelfio and Jorge Mateu</i></p>	

16:30-17:30	Parallel Contributed Sessions 9	
16:30-17:30	CON39 - Applications in Economics - chair: Paolo Mazzocchi	D2
	<p>The measurement of economic security through relative indicators <i>Alessandro Gallo, Silvia Pacei and Maria Rosaria Ferrante</i></p> <p>A regional analysis of the efficiency by energy's producers in Italy <i>Gianna Greca, Giuseppe Cinquegrana and Giovanni Fosco</i></p> <p>On investigating social and financial aspects of Cardano <i>Stefano Vacca, Marco Ortu, Gianpaolo Zammarchi and Giuseppe Destefanis</i></p> <p>Combined permutation test on the effect of age of micro enterprises on the propensity to Circular Economy <i>Stefano Bonnini and Michela Borghesi</i></p> <p>Comparison of Two Different Approaches to Measure Economic Access to Food and Insecurity: an Application to Mexican data <i>Stefano Marchetti, Luca Secondi and Adrian Vargas-Lopez</i></p>	
16:30-17:30	CON40 - Image analysis and visual methods - chair: Antonio Irpino	E2
	<p>Visual and automated methods in digital microscopy to evaluate fungal colonisation on plant roots <i>Ivan Sciascia, Andrea Crosino and Andrea Genre</i></p> <p>From satellite images to road pavement type: an object-oriented classification approach <i>Arianna Burzacchi, Matteo Landrò and Simone Vantini</i></p> <p>Valid inference for group analysis of functionally aligned fMRI images <i>Angela Andreella, Riccardo De Santis and Livio Finos</i></p> <p>Topological persistence for astronomical image segmentation <i>Riccardo Ceccaroni, Pierpaolo Brutti, Marco Castellano, Adriano Fontana and Emiliano Merlin</i></p>	
16:30-17:30	CON41 - Statistical assessment and empirical estimation - chair: Fabrizio Maturò	F2
	<p>Confidence regions for optimal sensitivity and specificity of a diagnostic test <i>Gianfranco Adimari, Duc-Khanh To and Monica Chiogna</i></p> <p>On the sensitiveness to the memory parameter in the network of tennis <i>Alberto Arcagni, Vincenzo Candila and Rosanna Grassi</i></p> <p>Two-part model with measurement error <i>Maria Felice Arezzo, Serena Arima and Giuseppina Guagnano</i></p> <p>Statistical assessment of practical significance <i>Andrea Ongaro, Sonia Migliorati and Enrico Ripamonti</i></p>	
16:30-17:30	CON42 - Autoregressive and mixed effects models - chair: Antonio Stefano Gattone	D3
	<p>Asymptotic Properties of the Nonlinear Least Squares Estimator in HE-HAR Models <i>Emilija Dzuverovic and Edoardo Otranto</i></p> <p>A note on testing for threshold non-linearity in presence of heteroskedasticity in time series <i>Simone Giannerini and Greta Goracci</i></p> <p>The conditional autoregressive Whart-G model <i>Massimiliano Caporin and Marco Girardi</i></p> <p>Semi-parametric generalized linear mixed effects models for binary response for the analysis of heart failure hospitalizations <i>Alessandra Ragni, Chiara Masci, Francesca Ieva and Anna Maria Paganoni</i></p>	
16:30-17:30	CON43 - Issues in Data science - chair: Antonio Balzanella	C3
	<p>etree: Classification and Regression With Structured and Mixed-Type Data in R <i>Riccardo Giubilei, Tullia Padellini and Pierpaolo Brutti</i></p> <p>Deep Learning framework for ungrouping coarsely aggregated vital rates <i>Andrea Nigri</i></p> <p>Inside the metaverse: analysis of the state of the art and development of a new usage approach based on quality and ethics <i>Vito Santarcangelo, Emilio Massa, Saverio Gianluca Crisafulli, Antonio Ruoto, Angelo Lamacchia, Alessandro D'Alcantara, Alessandro Verderame and Massimiliano Giacalone</i></p>	
17:30	CLOSING CEREMONY	A2