Programme
SIS 2021

Monday, June 21	
08:45 - 09:00	**Opening and welcome** *Corrado Crocetta*, President of SIS *Carlo Petronio*, Pro-Rector of University of Pisa *Luca Spataro*, Head of Department of Economics and Management of University of Pisa, *Francesco Mola*, Rector of University of Cagliari
09:00 - 10:00	**Plenary session 1** Chair: *Luigi Biggeri* *Raymond Chambers*: Nudging a Pseudo-Science Towards a Science - The Role of Statistics in a Rainfall Enhancement Trial in Oman
10:00 - 10:15	**Break**
10:15 - 11:45	**Parallel Specialized Sessions 1**
	Statistics for Finance: high frequency data, large dimension and network (SPE.1). Chair: *Marco Bee* - Discussant: *Giovanni De Luca* The Italian debt not-so-flash crash*. Maria Flora and Roberto Reno'* COVID-19 spreading in financial networks: A semiparametric matrix regression model*. Monica Billio* Peaks, Gaps, and Time Reversibility of Economic Time Series*. Tommaso Proietti*
	Integration of survey with alternative sources of data (SPE.2). Chair: *Annamaria Bianchi* - Discussant: *Paolo Righi* A parametric empirical likelihood approach to data matching under nonignorable sampling and nonresponse. *Daniela Marella and Danny Pfeffermann* Survey data integration for regression analysis using model calibration*. Jae-kwang Kim and Hang J. Kim* Latent Mixed Markov Models for the Production of Population Census Data on Employment. *Danila Filipponi, Ugo Guarnera and Roberta Varriale*
	Advances in Preference and Ordinal Data: Theoretical Improvements and Applications (SPE.3). Chair: *Claudio Conversano* - Discussant: *Antonio D'Ambrosio* Boosting for ranking data: an extension to item weighting. *Alessandro Albano, Mariangela Sciandra and Antonella Plaia* An Extended Bradley-Terry Model For The Analysis Of Financial Data. *Alessio Baldassarre, Elise Dusseldorp and Mark De Rooij* Lower-dimensional Bayes Mallows model: a short methodological introduction. *Emilie Eliseussen Ødegaard and Valeria Vitelli*
11:45 – 12:00	**Break**
12:00 – 13:15	**Parallel Contributed Sessions 1**
	Prior distribution for Bayesian analysis (CON.1). Chair: *Luca Tardella* On the dependence structure in Bayesian nonparametric priors. *Filippo Ascolani, Beatrice Franzolini, Antonio Lijoi and Igor Prünster*

Anisotropic determinantal point processes and their application in Bayesian mixtures. *Lorenzo Ghilotti, Mario Beraha and Alessandra Guglielmi*

Bayesian Screening of Covariates in Linear Regression Models Using Correlation Thresholds. *Ioannis Ntzoufras and Roberta Paroli*

Prior specification in smooth interaction models. *Maria Franco Villoria, Massimo Ventrucci and Haavard Rue*

Advances in statistical methods and inference (CON.2). Chair: *Marcella Niglio*

Estimation of Dirichlet Distribution Parameters with Modified Score Functions. *Vincenzo Gioia and Euloge Clovis Kenne Pagui*

Confidence distributions for predictive tail probabilities. *Giovanni Fonseca, Federica Giummolè and Paolo Vidoni*

Impact of sample size on stochastic ordering tests: a simulation study. *Rosa Arboretti, Riccardo Ceccato, Luca Pegoraro and Luigi Salmaso*

On testing the significance of a mode. *Federico Ferraccioli and Giovanna Menardi*

Hommel BH: an adaptive Benjamini-Hochberg procedure using Hommel's estimator for the number of true hypotheses. *Chiara G. Magnani and Aldo Solari*

Advances in clinical trials (CON.3). Chair: *Fabio Divino*

Quantitative depth-based [18F] FMCH-avid lesion profiling in prostate cancer treatment. *Lara Cavinato, Alessandra Ragni, Francesca Ieva, Martina Sollini, Francesco Bartoli and Paola A. Erba*

Modelling longitudinal latent toxicity profiles evolution in osteosarcoma patients. *Marta Spreafico, Francesca Ieva and Marta Fiocco*

Information borrowing in phase II basket trials: a comparison of different designs. *Marco Novelli*

Q-learning Estimation Techniques for Dynamic Treatment Regime. *Simone Bogni, Debora Slanzi and Matteo Borrotti*

Sample Size Computation for Competing Risks Survival Data in GS-Design. *Mohammad Anamul Haque and Giuliana Cortese*

Demographic analysis (CON.4). Chair: *Raffaele Guetto*

Life expectancy in the districts of Taranto. *Stefano Cervellera, Carlo Cusatelli and Massimiliano Giacalone*

Family size and Human Capital in Italy: a micro-territorial analysis. *Gabriele Ruiu, Marco Breschi and Alessio Fornasin*

Estimate age-specific fertility rates from summary demographic measures. An Indirect Model Levering on Deep Neural Network. *Andrea Nigri*

Patterns in the relation between causes of death and gross domestic product. *Andrea Nigri and Federico Crescenzi*

Analysing contributions of ages and causes of death to gender gap in life expectancy using functional data analysis. *Alessandro Feraldi, Virginia Zarulli, Stefano Mazzuco and Cristina Giudici*

Functional data analysis (CON.5). Chair: *Alessio Pollice*

Remote Analysis of Chapas Stops in Maputo from GPS data: a Functional Data Analysis Approach. *Agostino Torti, Davide Ranieri and Simone Vantini*

A Conformal approach for functional data prediction. *Jacopo Diquigiovanni, Matteo Fontana and Simone Vantini*

	Block testing in covariance and precision matrices for functional data analysis. *Marie Morvan, Alessia Pini, Madison Giacofci and Valerie Monbet* Locally sparse functional regression with an application to mortality data. *Mauro Bernardi, Antonio Canale, Marco Stefanucci* Supervised classification of ECG curves via a combined use of functional data analysis and random forest to identify patients affected by heart disease. *Fabrizio Maturo and Rosanna Verde*
	Advances in statistical models (CON.6). Chair: *Maria Giovanna Ranalli* Specification Curve Analysis: Visualising the risk of model misspecification in COVID-19 data. *Venera Tomaselli, Giulio Giacomo Cantone and Vincenzo Miracula* Semiparametric Variational Inference for Bayesian Quantile Regression. *Cristian Castiglione and Mauro Bernardi* Searching for a source of difference in undirected graphical models for count data – an empirical study. *Federico Agostinis, Monica Chiogna, Vera Djordjilovíc, Luna Pianesi and Chiara Romualdi* Snipped robust inference in mixed linear models. *Antonio Lucadamo, Luca Greco, Pietro Amenta and Anna Crisci* Machine Learning and Credit Risk - Empirical Evidence from SMEs. *Alessandro Bitetto*
13:15 – 14:00	**Break**
14:00 – 15:15	**Parallel Solicited Sessions 1**
	Light methods for hard problems (SOL.1). Chair: *Emanuele Aliverti* Fast Divide-and-Conquer Strategies to Solve Spatial Big Data Problems. *Michele Peruzzi* Application of hierarchical matrices in spatial statistics. *Anastasiia Gorshechnikova and Carlo Gaetan* Easy incorporation of prior information into frequentist procedures. *Peter Hoff* The statistical design and results of REMAP-CAP. *Lindsay R. Berry*
	Evaluation of undercoverage for censuses and administrative data (SOL.2). Chair: *Orietta Luzi* Spatially balanced indirect sampling to estimate the coverage of the agricultural census. *Federica Piersimoni, Francesco Pantalone and Roberto Benedetti* Next Census in Israel: Strategy, Estimation and Evaluation. *Danny Pfeffermann* Administrative data for population counts estimations in Italian Population Census. *Antonella Bernardini, Angela Chieppa, Nicoletta Cibella and Fabrizio Solari* LFS non response indicators for population register overcoverage estimation. *Loredana Di Consiglio and Stefano Falorsi*
	Compositions in the Data Science Era (SOL.3). Chair: *Gianna Monti* Can we Ignore the Compositional Nature of Compositional Data by using Deep Learning Aproaches? *Matthias Templ* Principal balances for three-way compositions. *Violetta Simonacci* Robust Regression for Compositional Data and its Application in the Context of SDG. *Valentin Todorov and Fatemah Alqallaf* Assessing Relationships in Relative Data Using Symmetric Pivot Coordinates. *Karel Hron and Peter Filzmoser*

	New perspectives on multidimensional child poverty (SOL.4). Chair: *Antonella D'Agostino*
	Estimating uncertainty for child poverty indicators: The Case of Mediterranean Countries. *Ilaria Benedetti, Federico Crescenzi and Riccardo De Santis*
	Child poverty and government social spending in the European Union during the economic crisis. *Angeles Sánchez and María Navarro*
	The Children's Worlds Study: New perspectives on children's deprivation research. *Caterina Giusti and Antoanneta Potsi*
	The impact of different definition of "households with children" on deprivation measures: the case of Italy. *Laura Neri and Francesca Gagliardi*
15:15 – 16:15	**Premio a Giovani Studiosi e Studiose per Contributi alle Discipline Statistiche.** Chair: *Matilde Bini*
	Interventions of *Alan Agresti* and *Corrado Crocetta*

Tuesday, June 22	
09:00 - 10:30	**Parallel Specialized Sessions 2**
	Advances in environmental statistics (SPE.4). Chair: *Francesco Finazzi* **-** Discussant: *Marian Scott*
	Bayesian small area models for investigating spatial heterogeneity and factors affecting the amount of solid waste in Italy. *Crescenza Calculli and Serena Arima*
	A spatial regression model for for predicting abundance of lichen functional groups. *Pasquale Valentini, Francesca Fortuna, Tonio Di Battista and Paolo Giordani*
	Stochastic Generators with Global Spatio-Temporal Locally Diffusive SPDE Models. *Stefano Castruccio*
	Media, social media and demographic behaviours (SPE.5). Chair: *Letizia Mencarini* - Discussant: *Bruno Arpino*
	Monitoring the Numbers of European Migrants in the United Kingdom using Facebook Data. *Francesco Rampazzo, Jakub Bijak, Agnese Vitali, Ingmar Weber and Emilio Zagheni*
	Narratives of the Future and Fertility: The Role of the Media Coverage of the Economy. *Maria Francesca Morabito*
	Online Footprints of Family Change: A Study Based on Twitter. *Nicolò Cavalli*
	Business system: innovation, competitiveness, productivity and internationalization (SPE.6). Chair: *Lucio Masserini* - Discussant: *Margherita Velucchi*
	An analysis of the dynamics of the competitiveness for some European Countries. *Andrea Marletta, Mauro Mussini and Mariangela Zenga*
	National innovation system and economic performance in EU. An analysis using composite indicators. *Alessandro Zeli*
	The role of global value chains in the pandemic impact on italian firms. *Giorgia Giovannetti, Michele Mancini, Enrico Marvasi and Giulio Vannelli*
	New developments in ensemble methods for classification (SPE.7). Chair: *Antonio Canale* - Discussant: *Rosanna Verde*
	An alternative approach for nowcasting economic activity during COVID-19 times. *Alessandro Spelta and Paolo Pagnottoni*
	Assessing the number of groups in consensus clustering by pivotal methods. *Roberta Pappadà, Francesco Pauli and Nicola Torelli*
	Clustering of data recorded by Distributed Acoustic Sensors to identify vehicle passage and typology. *Antonio Balzanella and Stefania Nacchia*
10:30 – 10:45	**Break**
10:45 – 12:00	**Parallel Contributed Sessions 2**
	New perspectives in clinical trials (CON.7). Chair: *Piero Manfredi*
	Improved maximum likelihood estimator in relative risk regression. *Euloge C. Kenne Pagui, Francesco Pozza and Alessandra Salvan*
	Development and validation of a clinical risk score to predict the risk of SARS-CoV-2 infection. *Laura Savaré, Valentina Orlando and Giovanni Corrao*
	Functional representation of potassium trajectories for dynamic monitoring of Heart Failure patients. *Caterina Gregorio, Giulia Barbati and Francesca Ieva*

Effect of lung transplantation on the survival of patients with cystic fibrosis: IMaCh contribution to registry data. *Cristina Giudici, Nicolas Brouard and Gil Bellis*

Categories and Clusters to investigate Similarities in Diabetic Kidney Disease Patients. *Veronica Distefano, Maria Mannone, Claudio Silvestri and Irene Poli*

New developments in composite indicators applications (CON.8). Chair: *Isabella Sulis*

Building composite indicators in the functional domain: a suggestion for an evolutionary HDI. *Francesca Fortuna, Alessia Naccarato and Silvia Terzi*

Small Area Estimation of Inequality Measures via Simplex Regression. *Silvia De Nicolò, Maria Rosaria Ferrante and Silvia Pacei*

Relational Well-Being and Poverty in Italy. *Elena Dalla Chiara and Federico Perali*

A composite indicator to assess sustainability of agriculture in European Union countries. *Alessandro Magrini and Francesca Giambona*

Interval-Based Composite Indicators with a Triplex Representation: A Measure of the Potential Demand for the "Ristori" Decree in Italy. *Carlo Drago*

New developments in GLM theory and applications (CON.9). Chair: *Mariagiulia Matteucci*

Variational inference for the smoothing distribution in dynamic probit models. *Augusto Fasano and Giovanni Rebaudo*

Interpretability and interaction learning for logistic regression models. *Nicola Rares Franco, Michela Carlotta Massi, Francesca Ieva and Anna Maria Paganoni*

Entropy estimation for binary data with dependence structures. *Linda Altieri and Daniela Cocchi*

A Comparison of Some Estimation Methods for the Three-Parameter Logistic Model. *Michela Battauz and Ruggero Bellio*

A statistical model to identify the price determinations: the case of Airbnb. *Giulia Contu, Luca Frigau, Gian Paolo Zammarchi and Francesco Mola*

Surveillance methods and statistical models in the Covid-19 crisis (CON.10). Chair: *Silvia Loriga*

The Italian Social Mood on Economy Index during the Covid-19 Crisis. *Alessandra Righi and Diego Zardetto*

Modeling the first wave of the COVID-19 pandemic in the Lombardy region, Italy, by using the daily number of swabs. *Claudia Furlan and Cinzia Mortarino*

Analysing the Covid-19 pandemic in Italy with the SIPRO model. *Martina Amongero, Enrico Bibbona and Gianluca Mastrantonio*

Intentions of union formation and dissolution during the COVID-19 pandemic. *Bruno Arpino and Daniela Bellani*

Local inequalities of the COVID-19 crisis. *Augusto Cerqua and Marco Letta*

New challenges in clustering and classification techniques (CON.11). Chair: *Leonardo Egidi*

A Dynamic Stochastic Block Model with infinite communities. *Roberto Casarin and Ovielt Baltodano Lòpez*

Cross-Subject EEG Channel Selection for the Detection of Predisposition to Alcoholism. *Michela Carlotta Massi and Francesca Ieva*

Some Issues on the Parameter Selection in the Spectral Methods for Clustering. *Cinzia Di Nuzzo and Salvatore Ingrassia*

	The link-match tale: new microdata from unit level association. *Riccardo D'Alberto, Meri Raggi and Daniela Cocchi*
12:00 – 13:00	**Plenary session 2** Chair: *Maurizio Vichi* *Anthony Atkinson*: Robust Statistics, the Shroud of Turin and Science
13:00 – 14:00	**Break**
14:00 – 15:15	**Parallel Solicited Sessions 2**
	Changes in the life course and social inequality (SOL.5). Chair: *Nazareno Panichella* Heterogeneous Income Dynamics: Unemployment Consequences in Germany and the US. *Raffaele Grotti* In-work poverty in Germany and in the US: The role of parity progression. *Emanuela Struffolino and Zachary Van Winkle Z.* Parenthood, education and social stratification. An analysis of female occupational careers in Italy. *Gabriele Ballarino and Stefano Cantalini* Does schooling decrease social inequality in early educational achievement? *Giampiero Passaretta and Jan Skopek*
	Hierarchical forecasting and forecast combination (SOL.6). Chair: *Luisa Bisaglia* Density calibration with consistent scoring functions. *Roberto Casarin and Francesco Ravazzolo* Forecasting combination of hierarchical time series: a novel method with an application to CoVid-19. *Livio Fenga* Dimensionality reduction in forecasting with temporal hierarchies. *Peter Nystrup* Non-negative cross-temporal forecast reconciliation. An application to the Australian domestic tourism flows. *Tommaso Di Fonzo and Daniele Girolimetto*
	Learning analytics: methods and applications (SOL.7). Chair: *Stefania Mignani* Open-Source Automated Test Assembly: the Challenges of Large-Sized Models. *Giada Spaccapanico Proietti* How Much Tutoring Activities May Improve Academic Careers of At-Risk Students? An Evaluation Study. *Marta Cannistra, Tommaso Agasisti, Anna Maria Paganoni and Chiara Masci* Composite–based Segmentation Trees to Model Learners' performance. *Cristina Davino and Giuseppe Lamberti* Test-taking Effort in INVALSI Assessments. *Chiara Sacco*
	Statistical analysis of energy data (SOL.8). Chair: *Luigi Grossi* Machine learning models for electricity price forecasting. *Silvia Golia, Luigi Grossi and Matteo Pelagatti* The impact of hydroelectric storage in the Italian power market. *Filippo Beltrami* Jumps and cojumps in electricity price forecasting. *Peru Muniain, Aitor Ciarreta and Ainhoa Zarraga* Tracking GDP in real-time using electricity market data: insights from the first wave of COVID-19 across Europe. *Carlo Fezzi and Valeria Fanghella*
15:15 – 15:30	**Break**

15:30 – 16:45	**Parallel Contributed Sessions 3**
	Bayesian non parametrics (CON.12). Chair: *Luca Tardella*
	Bayesian nonparametric prediction: from species to features. *Lorenzo Masoero, Federico Camerlenghi, Stefano Favaro and Tamara Broderick*
	A framework for filtering in hidden Markov models with normalized random measures. *Filippo Ascolani, Antonio Lijoi, Igor Prünster and Matteo Ruggiero*
	On the convex combination of a Dirichlet process with a diffuse probability measure. *Federico Camerlenghi, Riccardo Corradin and Andrea Ongaro*
	Detection of neural activity in calcium imaging data via Bayesian mixture models. *Laura D'Angelo, Antonio Canale, Zhaoxia Yu and Michele Guindani*
	Clustering for complex data (CON.13). Chair: *Domenico Vistocco*
	Clustering categorical data via Hamming distance. *Edoardo Filippi-Mazzola, Raffaele Argiento and Lucia Paci*
	Penalized model-based clustering for three-way data structures. *Andrea Cappozzo, Alessandro Casa, and Michael Fop*
	Does Milan have a smart mobility? A clustering analysis approach. *Nicola Cornali, Matteo Seminati, Paolo Maranzano and Paola M. Chiodini*
	A Fuzzy clustering approach for textual data. *Irene Cozzolino, Maria Brigida Ferraro and Peter Winker*
	Valid Double-Dipping via Permutation-Based Closed Testing. *Anna Vesely, Livio Finos, Jelle J. Goeman and Angela Andreella*
	Some recent developments in compositional data Analysis (CON.14). Chair: *Violetta Simonacci*
	A Robust Approach to Microbiome-Based Classification Problems. *Gianna Serafina Monti and Peter Filzmoser*
	What is a convex set in compositional data analysis? *Jordi Saperas i Riera and Josep Antoni Martín Fernández*
	Compositional Analysis on the Functional Distribution of Extended Income. *Elena Dalla Chiara and Federico Perali*
	Evaluating seasonal-induced changes in river chemistry using Principal Balances. *Caterina Gozzi and Antonella Buccianti*
	Compositional Data Techniques for the Analysis of the Ragweed Allergy. *Gianna S. Monti, Maira Bonini, Valentina Ceriotti, Matteo Pelagatti and Claudio M. Ortolani*
	Data Science for unstructured data (CON.15). Chair: *Paola Cerchiello*
	Identification and modeling of stop activities at the destination from GPS tracking data. *Nicoletta D'Angelo, Giada Adelfio, Antonino Abbruzzo and Mauro Ferrante*
	A generalization of derangement. *Maurizio Maravalle and Ciro Marziliano*
	Analysis of clickstream data with mixture hidden markov models. *Furio Urso, Antonino Abbruzzo and Maria Francesca Cracolici*
	Using Google Scholar to measure the credibility of preprints in the COVID-19 Open Research Dataset (CORD-19). *Manlio Migliorati, Maurizio Carpita and Eugenio Brentari*
	Mobile phone use while driving: a Structural Equation Model to analyze the Behavior behind the wheel. *Carlo Cavicchia and Pasquale Sarnacchiaro*

New developments in social statistics analysis (CON.16). Chair: *Mariano Porcu*

Data-based Evaluation of Political Agents Against Goals Scheduling. *Giulio D'Epifanio*

Local heterogeneities in population growth and decline. A spatial analysis for Italian municipalities. *Federico Benassi, Annalisa Busetta, Gerardo Gallo and Manuela Stranges*

The assessment of environmental and income inequalities. *Michele Costa*

Household financial fragility across Europe. *Marianna Brunetti, Elena Giarda and Costanza Torricelli*

Refugees' perception of their new life in Germany. *Daria Mendola and Anna Maria Parroco*

Wednesday, June 23	
09:00 - 10:00	**Plenary session 3** Chair: *Daniela Cocchi* *Elisabetta Barbi*: Demographic perspectives on human survival and longevity
10:00 - 10:15	**Break**
10:15 - 11:45	**Parallel Specialized Sessions 3**
	Challenges for observational studies in modern biomedicine (SIS - SIB) (SPE.8). Chair: *Paola Vicard* **-** Discussant: *Marco Bonetti* Data integration: a Statistical view. *Pier Luigi Conti* Exploring patients' profile from COVID-19 case series data: beyond standard statistical approaches. *Chiara Brombin, Federica Cugnata, Pietro E. Cippà, Alessandro Ceschi, Paolo Ferrari and Clelia di Serio* On the statistics for some pivotal anti-COVID-19 vaccine trials. *Mauro Gasparini*
	Semi-parametric and non-parametric latent class analysis (SPE.9). Chair: *Cristina Tortora*-Discussant: *Stefania Mignani* Stepwise Estimation of Multilevel Latent Class Models. *Zsuzsa Bakk, Roberto di Mari, Jennifer Oser and Jouni Kuha* Distance learning, stress and career-related anxiety during the Covid-19 pandemic: a students perspective analysis. *Alfonso Iodice D'Enza, Maria Iannario and Rosaria Romano* A Tempered Expectation-Maximization Algorithm for Latent Class Model Estimation. *Luca Brusa, Francesco Bartolucci and Fulvia Pennoni*
	Advances in ecological modelling (SPE.10). Chair: *Giovanna Jona Lasinio* - Discussant: *Gianfranco Lovison* A Bayesian joint model for exploring zero-inflated bivariate marine litter data. *Sara Martino, Crescenza Calculli and Porzia Maiorano* Population size estimation and classification of Tursiops truncatus at the Tiber River estuar. *Marco Mingione, Daniela Silvia Pace, Chiara Di Marco, Margherita Silvestri, Pierfrancesco Alaimo Di Loro, Giancarlo Giacomini, Giovanna Jona Lasinio and Giandomenico Ardizzone* We want you! How ecological studies on marine mammals need to meet targeted statistical methods. *Daniela Silvia Pace, Giancarlo Giacomini, Margherita Silvestri and Giandomenico Ardizzone*
	A glimpse of new data and methods for analysing a rapidly changing population (SPE.11). Chair: *Alessandra Petrucci* – Discussant: *Roberto Impicciatore* The diffusion of new family patterns in Italy: An update. *Arnstein Aassve, Letizia Mencarini, Elena Pirani and Daniele Vignoli* Causes of death patterns and life expectancy: looking for warning signals. *Stefano Mazzuco, Emanuele Aliverti, Daniele Durante and Stefano Campostrini* The big numbers of tertiary education in Italy. *Mariano Porcu, Marco Breschi, Giancarlo Ragozini and Giovanni Boscaino*
11:45 – 12:00	**Break**
12:00 – 13:15	**Parallel Contributed Sessions 4**

	Mixture models (CON.17). Chair: *Francesco Lagona*

Alternative parameterizations for regression models with constrained multivariate responses. *Roberto Ascari, Agnese Maria Di Brisco, Sonia Migliorati and Andrea Ongaro*

Spatially dependent mixture models with a random number of components. *Matteo Gianella, Mario Beraha and Alessandra Guglielmi*

Finite mixtures of regression models for longitudinal data. *Marco Alfò and Roberto Rocci*

Mixtures of regressions for size estimation of heterogeneous populations. *Gianmarco Caruso*

Finite mixtures of regressions with random covariates using multivariate skewed distributions. *Salvatore D. Tomarchio, Michael P.B. Gallaugher, Antonio Punzo and Paul D. McNicholas* |
| | **Social demography (CON.18).** Chair: *Raffaele Guetto*

Childcare among migrants: a comparison between Italy and France. *Eleonora Trappolini, Elisa Barbiano di Belgiojoso, Stefania Maria Lorenza Rimoldi and Laura Terzera*

Employment Uncertainty and Fertility in Italy: The Role of Union Formation. *Giammarco Alderotti, Valentina Tocchioni and Alessandra De Rose*

Determinants of union dissolution in Italy: Do children matter? *Valentina Tocchioni, Daniele Vignoli, Eleonora Meli and Bruno Arpino*

Working schedules and fathers' time with children: A Sequence Analysis. *Annalisa Donno and Maria Letizia Tanturri*

Correlates of the non-use of contraception among female university students in Italy. *Annalisa Busetta, Alessandra De Rose and Daniele Vignoli* |
| | **New applications of regression models (CON.19).** Chair: *Marco Doretti*

The Shapley-Lorenz decomposition approach to mitigate cyber risks. *Paolo Giudici and Emanuela Raffinetti*

A spatially adaptive estimator for the function-on-function linear regression model with application to the Swedish Mortality dataset. *Fabio Centofanti, Antonio Lepore, Alessandra Menafoglio, Biagio Palumbo and Simone Vantini*

POSetR: a new computationally efficient R package for partially ordered data. *Alberto Arcagni, Alessandro Avellone and Marco Fattore*

Multi Split Conformal Prediction. *Aldo Solari and Vera Djordjilović*

Changes in the consumption of fruits and vegetables among university students during master courses: an analysis of data automatically collected from cashier transactions. *Valentina Lorenzoni, Giuseppe Turchetti and Lucio Masserini* |
| | **Statistical applications in education (CON.20).** Chair: *Mariagiulia Matteucci*

Does self-efficacy influence academic results? A separable-effect mediation analysis. *Chiara Di Maria*

Statistics Knowledge assessment: an archetypal analysis approach. *Bruno Adabbo, Rosa Fabbricatore, Alfonso Iodice D'Enza and Francesco Palumbo*

Exploring drivers for Italian university students' mobility: first evidence from AlmaLaurea data. *Giovanni Boscaino and Vincenzo Giuseppe Genova*

Can Grading Policies influence the competition among Universities of different sizes? *Gabriele Lombardi and Antonio Pio Distaso*

The class A journals and the Italian academic research outcomes in Statistical Sciences. *Maria Maddalena Barbieri, Francesca Bassi, Antonio Irpino and Rosanna Verde* |

	Statistical methods for finance (CON.21). Chair: *Massimiliano Caporin*
	Hypotheses testing in mixed–frequency volatility models: a bootstrap approach. *Vincenzo Candila and Lea Petrella*
	Quantile Regression Forest with mixed frequency Data. *Mila Andreani, Vincenzo Candila and Lea Petrella*
	Higher order moments in Capital Asset Pricing Model betas. *Giuseppe Arbia, Riccardo Bramante and Silvia Facchinetti*
	When Does Sentiment Matter in Predicting Cryptocurrency Bubbles? *Arianna Agosto and Paolo Pagnottoni*
	Estimating correlations among elliptical random variables under heteroskedasticity. *Matteo Maria Pelagatti and Giacomo Sbrana*
13:15 – 14:15	**Break**
14:15 – 15:30	**Parallel Solicited Sessions 3**
	Excesses and rare events in complex systems (SOL.9). Chair: *Giada Adelfio*
	Space-time extreme rainfall simulation under a geostatistical approach. *Gianmarco Callegher, Carlo Gaetan, Noemie Le Carrer and Ilaria Prosdocimi*
	Threshold Exceedance Probabilities Based on Regularizing Sequences. *José Luis Romero and José Miguel Angulo*
	Non-crossing parametric quantile functions: an application to extreme temperatures. *Gianluca Sottile*
	Advances in social indicators research and latent variables modelling in social sciences (SOL.10). Chair: *Michela Gnaldi*
	A composite indicator to measure frailty using administrative healthcare data. *Margherita Silan, Rachele Brocco and Giovanna Boccuzzo*
	Clusters of contracting authorities over time: an analysis of their behaviour based on procurement red flags. *Simone Del Sarto, Paolo Coppola and Matteo Troìa*
	An Application of Temporal Poset on Human Development Index Data. *Leonardo Salvatore Alaimo, Filomena Maggino and Emiliano Seri*
	The SDGs System: a longitudinal analysis through PLS-PM. *Rosanna Cataldo, Maria Gabriella Grassia and Laura Antonucci*
	Household surveys for policy analysis (SOL.11). Chair: *Giovanni D'Alessio*
	Did the policy responses to COVID-19 protect Italian households' incomes? Evidence from survey and administrative data. *Maria Teresa Monteduro, Dalila De Rosa and Chiara Subrizi*
	Anti-poverty measures in Italy: a microsimulation analysis. *Pasquale Recchia*
	Modernizing survey systems during a pandemic. Mobilizing high-frequency phone surveys to understand the impact of COVID-19 in Africa. *Philip R Wollburg, Gero Carletto, Talip Kilic, Kevin Robert McGee and Zezza Alberto*
	Mind the wealth gap: a new allocation method to match micro and macro statistics for household wealth. *Andrea Neri*
	The impact of Jobs Act on labor and non-labor markets (SIE) (SOL.12). Chair: *Alberto Zazzaro*
	Firing costs and job loss: The case of the Italian Jobs Act. *Claudia Pigini*

	Job protection and mortgage conditions. *Alberto Zazzaro, Tommaso Oliviero, Paolo Emilio Mistrulli and Zeno Rotondi*
	Fertility Decisions and Employment Protection: The Unintended Consequences of the Italian Jobs Act. *Roberto Nisticò*

Thursday, June 24	
9:00 – 10:15	**Parallel Contributed Sessions 5**
	Data Science for complex data (CON.22). Chair: *Paola Cerchiello*
	Text mining on large corpora using Taltac4: An explorative analysis of the USPTO patents database. *Pasquale Pavone, Arianna Martinelli and Federico Tamagni*
	Emotion pattern detection on facial videos using functional statistics. *Rongjiao Ji, Alessandra Micheletti, Natasa Krklec Jerinkic and Zoranka Desnica*
	The spread of contagion on Twitter: identification of communities analysing data from the first wave of the COVID-19 epidemic. *Gianni Andreozzi, Salvatore Pirri, Giuseppe Turchetti and Valentina Lorenzoni*
	Composition-on-Function Regression Model for the Remote Analysis of Near-Earth Asteroids. *Mara S. Bernardi, Matteo Fontana, Alessandra Menafoglio, Alessandro Pisello, Massimiliano Porreca, Diego Perugini and Simone Vantini*
	Determinants of football coach dismissal in Italian League Serie A. *Francesco Porro, Marialuisa Restaino, Juan Eloy Ruiz-Castro and Mariangela Zenga*
	Enviromental statistics (CON.23). Chair: *Fabio Divino*
	A Distribution-Free Approach for Detecting Radioxenon Anomalous Concentrations. *Michele Scagliarini, Rosanna Gualdi, Giuseppe Ottaviano, Antonietta Rizzo and Franca Padoani*
	Ecosud Car, a novel approach for the predictive control of the territory. *Giacomo Iula, Massimo Dimo, Saverio Gianluca Crisafulli, Marco Vito Calciano, Vito Santarcangelo and Massimiliano Giacalone*
	Effect of ties on the empirical copula methods for weather forecasting. *Elisa Perrone, Fabrizio Durante and Irene Schicker*
	Spatio-temporal regression with differential penalization for the reconstruction of partially observed signals. *Eleonora Arnone and Laura M. Sangalli*
	Sea Surface Temperature Effects on the Mediterranean Marine Ecosystem: a Semiparametric Model Approach. *Claudio Rubino, Giacomo Milisenda, Antonino Abbruzzo, Giada Adelfio, Mar Bosch-Belmar, Francesco Colloca, Manfredi Di Lorenzo and Vita Gancitano*
	Novel approaches for Official Statistics (CON.24). Chair: *Francesco Pantalone*
	Web data collection: profiles of respondents to the Italian Population Census. *Elena Grimaccia, Gerardo Gallo, Alessia Naccarato, Novella Cecconi and Alessandro Fratoni*
	Trusted Smart Surveys: architectural and methodological challenges at a glance. *Mauro Bruno, Francesca Inglese and Giuseppina Ruocco*
	On bias correction in small area estimation: An M-quantile approach. *Gaia Bertarelli, Francesco Schirripa Spagnolo, Raymond Chambers and David Haziza*
	The address component of the Statistical Base Register of Territorial Entities. *Davide Fardelli, Enrico Orsini and Andrea Pagano*
	A well-being municipal indicator using census data: first results. *Massimo Esposito*
	Social indicators: applications and methods (CON.25). Chair: *Luca Secondi*
	A logistic regression model for predicting child language performance. *Andrea Briglia, Massimo Mucciardi and Giovanni Pirrotta*
	Subject-specific measures of interrater agreement for ordinal scales. *Giuseppe Bove*

	A Tucker3 method application on adjusted-PMRs for the study of work-related mortality. *Vittoria Carolina Malpassuti, Vittoria La Serra and Stefania Massari* Two case-mix adjusted indices for nursing home performance evaluation. *Giorgio E. Montanari and Marco Doretti* The ultrametric covariance model for modelling teachers' job satisfaction. *Carlo Cavicchia, Maurizio Vichi and Giorgia Zaccaria*
	Time series methods (CON.26). Chair: *Massimiliano Caporin* Bootstrap-based score test for INAR effect. *Riccardo Ievoli and Lucio Palazzo* Evaluating the performance of a new picking algorithm based on the variance piecewise constant models. *Nicoletta D'Angelo, Giada Adelfio, Antonino D'Alessandro and Marcello Chiodi* Conditional moments based time series cluster analysis. *Raffaele Mattera and Germana Scepi* On the asymptotic mean-squared prediction error for multivariate time series. *Gery Andrés Díaz Rubio, Simone Giannerini, and Greta Goracci* Spherical autoregressive change-point detection with applications. *Federica Spoto, Alessia Caponera and Pierpaolo Brutti*
10:15 – 10:30	**Break**
10:30 – 12:00	**Parallel Specialized session 4**
	Causal inference and mediation (SPE.12). Chair: *Elena Stanghellini* – Discussant: *Marco Doretti* High-dimensional mediation analysis. *Rhian Daniel* Heterogeneous Treatment and Spillover Effects under Clustered Network Interference. *Laura Forastiere* The inclusive synthetic control method. *Giovanni Mellace and Roberta Di Stefano*
	New developments in latent variable models (SPE.13). Chair: *Michela Battauz* – Discussant: *Ruggero Bellio* A Hidden Markov Model for Variable Selection with Missing Values. *Fulvia Pennoni, Francesco Bartolucci, and Silvia Pandolfi* Comparison between Different Likelihood Based Estimation Methods in Latent Variable Models for Categorical Data. *Silvia Bianconcini and Silvia Cagnone* A Comparison of Estimation Methods for the Rasch Model. *Alexander Robitzsch*
	New issues on multivariate and univariate quantile regression (SPE.14). Chair: *Lea Petrella* – Discussant: *Maria Francesca Marino* Directional M-quantile regression for multivariate dependent outcomes. *Luca Merlo, Lea Petrella and Nikos Tzavidis* Conditional mid-quantiles for discrete outcomes. *Marco Geraci and Alessio Farcomeni* Minimum Distance Estimation of the Grouped IV Quantile Regression Model. *Blaise Melly*
	Data Science for Industry 4.0 (ENBIS) (SPE.15). Chair: *Grazie Vicario*– Discussant: *Antonio Lepore* Sample selection from a given dataset to validate machine learning models. *Bertrand Iooss* Reliable data-drive modelling and optimisation of a batch reactor using bootstrap aggregated deep belief networks. *Changhao Zhu and Jie Zhang* Augmented designs ensuring a minimum efficiency. *Jesús Fernando López Fidalgo*
12:00 – 12:15	**Break**

12:15 - 13:30	**Parallel Solicited Sessions 4**
	Statistical methods and models for the analysis of sports data (SOL.13). Chair: *Mauro Bernardi*
	Football analytics: a Higher-Order PLS-SEM approach to evaluate players' performance. *Mattia Cefis and Maurizio Carpita*
	Bayesian regularized regression of football tracking data through structured factor models. *Lorenzo Schiavon and Antonio Canale*
	A dynamic matrix-variate model for clustering time series with multiple sources of variation. *Mattia Stival*
	Evaluating football players' performances using on-the-ball data. *David Dandolo*
	Management and Statistics in Search for a Common Ground (AIDEA) (SOL.14). Chair: *Giovanni Battista Dagnino*
	Puzzling out what matters most in ESG ratings. Identificazione dei fattori determinanti dei rating ESG*. Valentina Lagasio, Francesco Corielli and Marina Brogi*
	Customer Segmentation: it's time to make a change. *Fabrizio Laurini, Beatrice Luceri and Sabrina Latusi*
	Multivariate prediction models: Altman's ZScore and CNDCEC's sectoral indicators. *Alessandro Danovi, Alberto Falini and Massimo Postiglione*
	Comparing Entrepreneurship and Perceived Quality of Life in the European Smart Cities: a "Posetic" Approach*. Lara Penco, Enrico Ivaldi and Andrea Ciacci*
	The Relationship between Business Economics and Statistics: Taking Stock and Ways Forward. *Amedeo Pugliese*
	Perspectives in Social Network Analysis Applications (SOL.15). Chair: *Maria Prosperina Vitale*
	A comparison of student mobility flows in Eramus and Erasmus+ among countries. *Kristijan Breznik, Giancarlo Ragozini and Marialuisa Restaino*
	Network-based approach for the analysis of LexisNexis news database. *Carla Galluccio and Alessandra Petrucci*
	A multiplex network approach to study Italian Students' Mobility. *Ilaria Primerano, Francesco Santelli and Cristian Usala*
	Ego-centered Support Networks:a Cross-national European Comparison. *Emanuela Furfaro, Elvira Pelle, Giulia Rivellini and Susanna Zaccarin*
	Well-being, healthcare, integration: measurements and indicators (SIEDS) (SOL.16). Chair: *Venera Tomaselli*
	A Composite Index of Economic Well-being for the European Union Countries. *Andrea Cutillo, Matteo Mazziotta and Adriano Pareto*
	Poverty orderings and TIP curves: an application to the Italian regions*. Francesco M. Chelli, Mariateresa Ciommi and Chiara Gigliarano*
	Transition to unemployed after the first Covid19 wave, who is most at risk? Evidence from migrants living in Lombardy. *Livia Elisa Ortensi and Gian Carlo Blangiardo*
13:30 – 15:30	**Break**
15:30 - 16:30	**Parallel Poster Sessions**
	Poster Session 1 (POS.1). Chair: *Gaia Bertarelli*

	Predicting economic indicators using textual data from Parliament verbatim reports. *Alessandra Amendola and Alessandro Grimaldi*
	A method for incorporating historical information in non-inferiority trials. *Fulvio De Santis and Stefania Gubbiotti*
	Optimal credible intervals under alternative loss functions. *Fulvio De Santis and Stefania Gubbiotti*
	Future scenarios and spatial data mining: an application on COVID-19 Twitter data. *Simone Di Zio and Yuri Calleo*
	Applications of Design of Experiments and machine learning on product innovation: a literature review. *Rosa Arboretti, Riccardo Ceccato, Luca Pegoraro and Luigi Salmaso*
	Europeans' attitudes towards the idea of a Universal Basic Income. Paolo Emilio Cardone
	Poster Session 2 (POS.2). Chair: *Stefano Marchetti*
	Classification of Delphi outputs through robust ranking and fuzzy clustering for Delphi-based Future Scenarios. *Simone Di Zio, Mario Bolzan and Marco Marozzi*
	Statistical learning for credit risk modelling. *Veronica Bacino, Alessio Zoccarato, Caterina Liberati and Matteo Borrotti*
	Italian Millennials and Subjective Well-Being: the Role of Deprivation on Life Satisfaction. *Laura Barbieri, Elena Calegari and Enrico Fabrizi*
	Evaluating heterogeneity of agreement with strong prior information. *Federico M. Stefanini*
	Dynamic skill gap analysis: highly skilled migrants case. *Margaret Antonicelli*
	Analysis of the spatial interdependence of the size of endore duplicated nuclei observed in confocal microscopy. *Ivan Sciascia, Andrea Crosino, Gennaro Carotenuto and Andrea Genre*
	Poster Session 3 (POS.3). Chair: *Francesco Schirripa Spagnolo*
	Likert-type scales variables in cluster analysis. *Nicolò Biasetton, Marta Disegna and Luigi Salmaso*
	A Density-Peak Approach to Clustering Graph-Structured Data. *Riccardo Giubilei*
	The employment situation of people with disabilites in Tuscany, A Survey on the workplace. *Paolo Addis, Alessandra Coli and Gianfranco Francese*
	Who wants to publish an "A" paper? *Antonio Irpino, Maria Maddalena Barbieri, Francesca Bassi and Rosanna Verde*
	Robustness of statistical methods for modeling paired count data using bivariate discrete distributions with general dependence structures. *Marta Nai Ruscone and Dimitris Karlis*
17:00 – 18:00	**SIS General Assembly**

Friday, June 25	
09:00 - 10:15	**Parallel Contributed session 6**
	Spatial data analysis (CON. 27). Chair: *Alessio Pollice*
	Spatial multilevel mixed effects modeling for earthquake insurance losses in New Zealand. *F. Marta L. Di Lascio and Selene Perazzini*
	Weighted distances for spatially dependent functional data. *Andrea Diana, Elvira Romano, Claire Miller and Ruth O'Donnell*
	Spatial modeling of childcare services in Lombardia. *Lucia Zanotto Emanuele Aliverti, Stefano Campostrini and Federico Caldura*
	On the use of a composite attractiveness index for the development of sustainable tourist routes. *Claudia Cappello, Sandra De Iaco, Sabrina Maggio and Monica Palma*
	Advances in statistical methods (CON. 28). Chair: *Mariagiulia Matteucci*
	Robustness of Fractional Factorial Designs through Circuits. *Roberto Fontana and Fabio Rapallo*
	Multi-objective optimal allocations for experimental studies with binary outcome. *Alessandro Baldi Antognini, Rosamarie Frieri, Marco Novelli and Maroussa Zagoraiou*
	Analysis of three-way data: an extension of the STATIS method. *Laura Bocci and Donatella Vicari*
	KL-optimum designs to discriminate models with different variance function. *Alessandro Lanteri, Samantha Leorato and Chiara Tommasi*
	Riemannian optimization on the space of covariance matrices. *Jacopo Schiavon, Mauro Bernardi and Antonio Canale*
	Statistical methods in higher education (CON. 29). Chair: *Luca Secondi*
	Effects of remote teaching on students' motivation and engagement: the case of the University of Modena & Reggio Emilia. *Isabella Morlini and Laura Sartori*
	A random effects model for the impact of remote teaching on university students' performance. *Silvia Bacci, Bruno Bertaccini, Simone Del Sarto, Leonardo Grilli and Carla Rampichini*
	Multinomial semiparametric mixed-effects model for profiling engineering university students. *Chiara Masci, Francesca Ieva and Anna Maria Paganoni*
	Evaluating Italian universities: ANVUR periodic accreditation judgment versus international rankings. *Angela Maria D'Uggento, Nunziata Ribecco and Vito Ricci*
	Women's career discrimination in the Italian Academia in the last 20. *Daniele Cuntrera, Vincenzo Falco and Massimo Attanasio*
	Statistical methods with Bayesian networks (CON. 30). Chair: *Daniela Marella*
	Statistical Micro Matching Using Bayesian Networks. *Pier Luigi Conti, Daniela Marella, Paola Vicard and Vincenzina Vitale*
	Modeling school managers challenges in the pandemic era with Bayesian networks. *Maria Chiara De Angelis and Flaminia Musella and Paola Vicard*
	Structural learning of mixed directed acyclic graphs: a copula-based approach. *Federico Castelletti*
	Inference on Markov chains parameters via Large Deviations ABC. *Cecilia Viscardi, Fabio Corradi, Michele Boreale and Antonietta Mira*
	A propensity score approach for treatment evaluation based on Bayesian Networks. *Federica Cugnata, Paola M.V. Rancoita, Pier Luigi Conti, Alberto Briganti, Clelia Di Serio, Fulvia Mecatti and Paola Vicard*

	Statistical modelling for the analysis of contemporary societies (CON. 31). Chair: *Raffaele Guetto*
	Social Network Analysis to analyse the relationship between 'victim-author' and 'motivation' of violence against women in Italy. *Alessia Forciniti*
	Satisfaction and sustainability propensity among elderly bike-sharing users. *Paolo Maranzano, Roberto Ascari, Paola Maddalena Chiodini and Giancarlo Manzi*
	Media and Investors' Attention. Estimating analysts' ratings and sentiment of a financial column to predict abnormal returns. *Riccardo Ferretti and Andrea Sciandra*
	Predictions of regional HCE: spatial and time patterns in an ageing population framework. *Laura Rizzi, Luca Grassetti, Divya Brundavanam, Alvisa Palese and Alessio Fornasin*
	Public support for an EU-wide social benefit scheme: evidence from Round 8 of the European Social Survey (ESS). *Paolo Emilio Cardone*
10:15 – 10:30	**Break**
10:30 – 11:30	**Plenary session 4** Chair: *Nicola Torelli* Monica Pratesi: Citizen data and citizen science: a challenge for official statistics
11:30 – 11:45	**Break**
11:45 – 13:00	**Parallel Contributed Sessions 7**
	Statical methods for High dimensional data (CON.32). Chair: *Raffinetti Emanuela*
	Virtual biopsy in action: a radiomic-based model for CALI prediction. *Francesca Ieva, Giulia Baroni, Lara Cavinato, Chiara Masci, Guido Costa, Francesco Fiz, Arturo Chiti and Luca Viganò*
	Functional alignment by the "light" approach of the von Mises-Fisher-Procrustes model. *Angela Andreella and Livio Finos*
	A screening procedure for high-dimensional autologistic models. *Rodolfo Metulini and Francesco Giordano*
	Ranking-Based Variable Selection for ultra-high dimensional data in GLM framework. *Francesco Giordano, Marcella Niglio and Marialuisa Restaino*
	New perspectives in models for multivariate dependency (CON.33). Chair: *Caterina Giusti*
	Parsimonious modelling of spectroscopy data via a Bayesian latent variables approach. *Alessandro Casa, Tom F. O'Callaghan and Thomas Brendan Mur*
	Bias reduction in the equicorrelated multivariate normal. *Elena Bortolato and Euloge Clovis Kenne Pagui*
	Some results on identifiable parameters that cannot be identified from data. *Christian Hennig*
	A Multivariate Dependence Analysis for Electricity Prices. *Luca Rossini, Fabrizio Durante, Angelica Gianfreda and Francesco Ravazzolo*
	Advances in neural networks (CON.34). Chair: *Bitetto Alessandro*
	Linear models vs Neural Network: predicting Italian SMEs default. *Lisa Crosato, Caterina Liberati and Marco Repetto*
	Network estimation via elastic net penalty for heavy-tailed data. *Davide Bernardini, Sandra Paterlini and Emanuele Taufer*
	Neural Network for statistical process control of a multiple stream process with an application to HVAC systems in passenger rail vehicles. *Gianluca Sposito, Antonio Lepore, Biagio Palumbo and Giuseppe Giannini*

	Forecasting air quality by using ANNs. *Annalina Sarra, Adelia Evangelista, Tonio Di Battista and Francesco Bucci*
	Advances in time series (CON.35). Chair: *Candila Vincenzo* A spatio-temporal model for events on road networks: an application to ambulance interventions in Milan. *Andrea Gilardi and Riccardo Borgoni and Jorge Mateu* Forecasting electricity demand of individual customers via additive stacking. *Christian Capezza, Biagio Palumbo, Yannig Goude, Simon N. Wood and Matteo Fasiolo* Hierarchical Forecast Reconciliation on Italian Covid-19 data. *Andrea Marcocchia, Serena Arima and Pierpaolo Brutti* Link between Threshold ARMA and tdARMA models. *Guy Mélard and Marcella Niglio*
	Recent advances in clustering methods (CON.36). Chair: *M. Francesca Marino* Biclustering longitudinal trajectories through a model-based approach. *Francesca Martella, Marco Alfò and Maria Francesca Marino* Monitoring tools for robust estimation of Cluster Weighted models. *Andrea Cappozzo and Francesca Greselin* Co-clustering Models for Spatial Transciptomics: Analysis of a Human Brain Tissue Sample. *Andrea Sottosanti and Davide Risso* Graph nodes clustering: a comparison between algorithms. *Ilaria Bombelli*
	New developments in Bayesian methods (CON.37). Chair: *Leonardo Egidi* Spatio-temporal analysis of the Covid-19 spread in Italy by Bayesian hierarchical models. *Nicoletta D'Angelo, Giada Adelfio and Antonino Abbruzzo* Modelling of accumulation curves through Weibull survival functions. *Alessandro Zito, Tommaso Rigon and David B. Dunson* Model fitting and Bayesian inference via power expectation propagation. *Emanuele Degani, Luca Maestrini and Mauro Bernardi* Bayesian quantile estimation in deconvolution. *Catia Scricciolo* Bayesian inference for discretely observed non-homogeneous Markov processes. *Rosario Barone and Andrea Tancredi*
13:00 – 13:45	**Break**
13:45 – 15:00	**Parallel Solicited Sessions 5**
	Mathematical Methods and Tools for Finance and Insurance (AMASES) (SOL.17). Chair: *Marco Corazza* On the valuation of the initiation option in a GLWB variable annuity. *Anna Rita Bacinello and Pietro Millossovich* Modern design of life annuities in view of longevity and pandemics. *Annamaria Olivieri* Risk Management from Finance to Production Planning: An Assembly-to-Order Case Study. *Paolo Brandimarte, Edoardo Fadda and Alberto Gennaro* Some probability distortion functions in behavioral portfolio selection. *Diana Barro, Marco Corazza and Martina Nardonthors*
	Multiple System Estimation (SOL.18). Chair *Brunero Liseo* Multiple Systems Estimation in the Presence of Censored Cells. *Ruth King, Oscar Rodriguez de Rivera Ortega and Rachel McCrea*

	Bayesian population size estimation by repeated identifications of units. A semi-parametric mixture model approach. *Tiziana Tuoto, Davide Di Cecco and Andrea Tancredi*
	Random partitions for microclustering. *Giacomo Zanella*
	Network sampling and estimation (SOL.19). Chair: *Pier Francesco Perri* Targeted random walk sampling. *Li-Chun Zhang* Estimation of poverty measures in Respondent-driven sampling. *María del Mar Rueda, Ismael Sànchez-Borrego and Héctor Mullo* Sampling Networked Data for Semi-Supervised Learning Algorithms. *Simone Di Zio, Lara Fontanella, Francesco Pantalone and Federica Piersimoni* A sequential adaptive sampling scheme for rare populations with a network structure. *Emilia Rocco*
	The social and demographic consequences of international migration in Western societies (SOL.20). Chair: *Roberto Impicciatore* Employment and job satisfaction of immigrants: the case of Campania (Italy). *Alessio Buonomo, Stefania Capecchi, Francesca Di Iorio and Salvatore Strozza* Social stratification of migrants in Italy: class reproduction and social mobility from origin to destination. *Giorgio Piccitto, Maurizio Avola and Nazareno Panichella* Transnational families and educational outcomes: Evidence from Second-Generation Immigrants in Italy. *Francesca Tosi* Consequences of illegal spells. Previous undocumented experience and labour market outcomes in Italy. *Roberto Impicciatore, Rocco Molinari and Livia Elisa Ortensi*
15:00 – 16:00	**Break**
16:00 – 17.15	**Panel discussion: Designing social and gender indicators for policies: a challenge for statistics and policy makers** Chair: *Corrado Crocetta*, President of SIS *Linda Laura Sabbadini* (Organiser), Central director of Istat, Chair Women20 *Francesca Grum*, Chief of the Social and Gender Statistics Section in the United Nations Statistics Division (UNSD) *Monica Pratesi*, holder of the Jean Monnet Chair Small Area methods for Multidimensional Poverty and living conditions, President elect IASS *Filomena Maggino*, Professor of Social Statistics at the Sapienza University of Rome, Coordinator of the Department for Integral Wellbeing – Pontificia Academia Mariana Internationalis (Santa Sede). *Angela Me*, chief of the United Nations Office for Drug and Crime Statistics and Surveys Section
17:15 – 17:30	**Closing ceremony**