CONFERENCE "DEALING WITH COMPLEXITY IN SOCIETY: FROM PLURALITY OF DATA TO SYNTHETIC INDICATORS"

University of Padua
Thursday 17th and Friday 18th of September 2015

PROGRAM

Sept, 17th 08.30 – 09.45, Sala della Basilica

Registration and welcome coffee
(open bar until 11.30)

Sept 17th 09.45 – 10.30, Archivio Antico

OPENING SESSION

Giuseppe Zaccaria, Chancellor of the University of Padua
Ming-Chang TSAI, President of the ISA Research Committee on Social Indicators RC55
Nicola Torelli, President of the Italian Society of Statistics
Alessandra Salvan, Head of the Department of Statistical Sciences
Giovanna Boccuzzo and Filomena Maggino, Conference Chairs

Sept 17th 10.30 – 12.00, Archivio Antico

Round table: "THE ROLE OF COMPOSITE INDICATORS IN THE DATA REVOLUTION"

Chair: Filomena Maggino, University of Florence

Keynote Speaker: Enrico Giovannini, University of Rome “Tor Vergata”

Speakers: Sabina Alkire, Oxford University, OPHI; Giuseppe Nicoletti, OECD; Roberto Barcellan, EUROSTAT
**Sept 17th 12.00 – 13.30, Archivio Antico**

**Session 1: Synthetic Measures of Gender Equality**

**Chair:** Maria Letizia Tanturri, University of Padua, Italy

**Invited Speech:** Anna Rita Manca, European Institute for Gender Equality, Vilnius, Lithuania.

*Measuring Gender Equality in EU through a Time Series: EIGE Gender Equality Index*

Agnese Maria Di Brisco and Patrizia Farina, "Milano-Bicocca" University – Milan, Italy.

*Measuring gender gap from a poset perspective*

Piotr Michon, Poznań University of Economics Poznań, Poland.

*The Division of Household Labour in Dual-Earner Families – in the search for synthetic indicators*

**Sept 17th 12.00 – 13.30, Aula Nievo**

**Session 2: Latent variable models for computing synthetic indicators**

**Chair:** Maurizio carpita, University of Brescia, Italy

Organizers: Vincenzo Esposito Vinzi (ESSEC Business School, Cergy, France) and Laura Trinchera (NEOMA Business School, Rouen, France)

Maurizio Vichi, "Sapienza" University of Rome, Italy.

*Statistical composite indicators to convey consistent policy messages*

Vincenzo Esposito Vinzi, ESSEC Business School, Cergy, France; Giorgio Russolillo, CNAM, Paris, France; Laura Trinchera, NEOMA Business School, Rouen, France

*Multidimensional and non-metric extensions of PLS Path Modeling for synthetic indicators.*

Cristina Davino, University of Macerata, Italy; Pasquale Dolce, University of Naples Federico II, Italy; Vincenzo Esposito Vinzi, ESSEC Business School, Cergy, France; Stefania Taralli, Italian National Institute of Statistics, Ancona, Italy

*Quantile Composite-based Path Modeling for measuring equitable and sustainable well-being*

Mario Fordellone and Giovanna Boccuzzo, University of Padua, Italy

*Non-metric PLS path modelling: a new approach to building a composite indicator of job quality*

**Sept 17th 13.30 – 14.30, Sala Basilica**

**lunch**

**Sept 17th 14.30 – 15.30, Archivio Antico**

**Keynote Speech**

*Epistemology of Complexity: The Rethoric Way and the Scientific Way*

**Alberto Peruzzi,** University of Florence
Sept 17th 15.30 – 17.00, Archivio Antico
Session 3: Social Cohesion and Sustainability
Chair: Enrico Giovannini, University of Rome "Tor Vergata"

Georgi Dragolov and Klaus Boehnke, Jacobs University Bremen, Germany; Jan Delhey, Otto von Guericke University Magdeburg, Germany

*Developing an index of social cohesion*

Gianmario Bottoni, “La Sapienza” University, Rome, Italy

*A multilevel SEM measurement model of social cohesion*

Enrico di Bella, Lucia Leporatti, Barbara Cavalletti, University of Genoa, Italy; Matteo Corsi, University of Pavia, Italy

Twenty years of sustainable development efforts: a multi-indicators approach

Luca Farnia, Lorenza Campagnolo, Fabio Eboli, Fondazione Eni Enrico Mattei, Italy, Centro Euro-Mediterraneo sui Cambiamenti Climatici, Italy; Carlo Carraro, University Cà Foscari of Venice, Italy, Fondazione Eni Enrico Mattei, Italy; Silvio Giove, University Cà Foscari of Venice, Italy.

Fuzzy measures, Choquet integral and preferences elicitation: an application to the sustainability composite index

Sept 17th 15.30 – 17.00, Aula Nievo
Session 4: Citizens’ opinions and needs
Chair: Christian Suter, University of Neuchâtel, Switzerland

Mario Quaranta, LUISS “Guido Carli”, Roma, Italy

*What is the quality of democracy? A citizens’ perspective from Europe.*

Hamed Hosseini, The University of Newcastle, Australia; Lawrence J. Saha, College of Arts and Social Sciences, The Australian National University, Australia

How ‘Critically Open-minded’ are we? An Australian Perspective, through the World Values Survey (2005-2012)

Francesco Vidoli, "Roma tre" University, Rome, Italy

Infrastructure Local Expenditure Needs: a proposal for Italian municipalities

Frauke Fuhrmann and Margit Scholl, Technical University of Applied Sciences, Wildau, Germany; Rainer Bruggemann, Leibniz-Institute of Freshwater Ecology and Inland Fisheries, Berlin, Germany

How can indicators support the empowerment of employees with intellectual disabilities?
September, 17th Evening
Social program
17.00 – 19.00: cocktail and visit to Botanical Garden
19.00: social dinner in the Botanical Garden

Sept 18th 09.00 – 10.30 Archivio Antico
Session 5: Social reporting of quality of life indicators
Chair: Matteo Mazziotta, Italian National Institute of Statistics

Jeroen Boelhouwer, The Netherlands Institute for Social Research
An index for quality of life: 40 years of experience

Jehane Simona Moussa, Tugce Beycan, Katia Iglesias Rutishauser and Christian Suter, University of Neuchâtel, Switzerland
Multidimensional Quality of Life in Switzerland: Towards New Synthetic Measures for Social Reporting

Eduardo González Fidalgo, Ana Cárcaba García and Juan Ventura Victoria, University of Oviedo, Spain
Combining dimensions of Quality of Life in Spanish Municipalities

Elena Tosetto, Carlotta Balestra and Romina Boarini, OECD Statistics Directorate, Paris, France
“Your” Better Life Index: involving people and learning what matters most to them

Sept 18th 09.00 – 10.30, Aula Nievo
Session 6: Measuring performance
Chair: Michela Gnaldi, University of Perugia, Italy

Francesco Porcelli, University of Warwick, UK
A Four Quadrants Model to monitor the performance of Local Governments

Eleonora Carrozzo and Rosa Arboretti, University of Padova, Italy
NPC-based Global Indicators for Teaching University Assessment

Enrico di Bella, Luca Gandullia, Lucia Leporatti and Marcello Montefiori, University of Genoa, Italy; Patrizia Orcamo, Region Liguria, Health Regional Agency, Genoa, Italy
A multi-indicators approach for comparing Emergency Departments

Daria Mendola, University of Palermo, Italy; Serena Volo, Free University of Bozen-Bolzano, Italy
An analytical review of destination competitiveness` indicators
Giulio D'Epifanio, University of Perugia, Italy

*Indexing the performance of social agents. An approach based on social planning*

Sept 18th 10.30 – 11.00, Sala Basilica

Coffee break

Sept 18th 11.00 – 12.00, Archivio Antico

**Keynote Speech**

"*Scalability of composite indices: Complexity complications and findings from 15 years of monitoring child and youth well-being in the United States*"

**Kenneth Land**, Duke University

Sept 18th 12.00 – 13.30, Archivio Antico

**Session 7: Measures of Deprivation**

Chair: Kenneth Land, Duke University, USA

Sabina Alkire, University of Oxford, Director of the Oxford Poverty & Human Development Initiative (OPHI)

*Measuring Multidimensional Poverty and Well-being: an axiomatic and counting approach and its applications*

Enrique Delamonica, UNICEF, Abuja, Nigeria and Maryam Abdu, UNICEF, Freetown, Sierra Leone

*Multidimensional Child Poverty: from complex weighting to simple representation*

Marco Fattore, "Milano Bicocca" University, Milan, Italy, and Filomena Maggino, University of Florence, Italy.

*Partial order theory: a new setting for the evaluation of multidimensional poverty and inequality*

Sept 18th 12.00 – 13.30, Aula Nievo

**Session 8: Households and socio-economic fragility**

Chair: Elena Tosetto, OECD

Veronica Cappa, Maurizio Carpita and Anna Simonetto, University of Brescia, Italy

*Latent constructs and composite indicators for measuring well-being of the households living in Brescia*

Marco Marozzi, University of Calabria, Rende (CS), Italy; Mario Bolzan, University of Padua, Italy

*An index of public service accessibility for households*
An entropy-based early warning indicator for measuring systemic risk

Sept 18th 13.30 – 14.15, Sala Basilica
lunch

Sept 18th 14.15 – 16.15 Archivio Antico
Session 9: Methodological concerns
Chair: Tsai Ming-Chang, Academia Sinica, Taipei, Taiwan

Matteo Mazziotta and Adriano Pareto, Italian National Institute of Statistics, Rome, Italy
On a Generalized Non-Compensatory Composite Index for Measuring Socio-economic Phenomena

Georg P. Mueller, University of Fribourg, Switzerland
Time Intervals Versus Composite Index Scores: An Alternative Approach for the Measurement of the Socio-economic Development of Countries

Tommaso Luzzati and Bruno Cheli, University of Pisa, Italy
Communicating the uncertainty of synthetic indicators: a reassessment of the HDI ranking
Brief discussion

Ludovico Carrino and Silvio Giove, "Ca’ Foscari" University, Venice, Italy
Making subjectivity explicit: a multidimensional measure of Social Inclusion for European regions with expert-based normalization and aggregation functions.

Jan W. Owsiński, Systems Research Institute, Polish Academy of Sciences, Warszawa, Poland
Is there any ‘law of requisite variety’ in construction of indices for complex systems?

Simone Del Sarto and Michela Gnaldi, University of Perugia, Italy
A latent class multidimensional IRT model approach to select most informative items within standardised students’ tests for school restitution.

Sept 18th 14.15 – 16.15, Aula Nievo
Session 10: Theory and methods for well-being measurement
Chair: Jeroen Boelhouwer, The Netherlands Institute for Social Research

Pasquale De Muro, "Roma Tre" University, Rome, Italy
Consistent multidimensional well-being measurement

Maria Rita Sebastiani and Giuseppina Guagnano, "Sapienza" University, Rome, Italy.
Away from dissatisfaction, closer to well-being: A multidimensional synthetic measure
Giulio Caperna and Giovanna Boccuzzo, University of Padua, Italy.
Rainer Brüggemann, Leibniz-Institute of Freshwater Ecology and Inland Fisheries, Berlin, Germany.

*Measuring well-being: poset theory as a tool for synthesis of information from a big set of data.*
Eugenia Nissi and Annalina Sarra, “G. d’Annunzio” University, Pescara, Italy

*A measure of well-being across European countries: An integrated DEA-entropy approach*

Barbara Cavalletti, University of Genoa, Italy; Matteo Corsi, Giorgio Panella, University of Pavia, Italy

*Consumption, income and subjective well-being: a synthetic indicator of relationship under comparability conditions*

**Sept 18th 16.15-17.40, Archivio Antico**

**Session 11: Generalized Software to Compute Composite Indicators**

Chair: Bruno Scarpa, University of Padua, Italy
Organizer: Matteo Mazziotta, Italian National Institute of Statistics (ISTAT), Rome, Italy.

Marco Broccoli, Giulio Barcaroli, Matteo Mazziotta, Italian National Institute of Statistics, Rome, Italy.

*Web-Ranker: Istat Software to Compute Composite Indicators*

Pierpaolo Massoli, Matteo Mazziotta, Adriano Pareto and Claudia Rinaldelli, Italian National Institute of Statistics, Rome, Italy.

*COMIC: A tool for composite indices evaluation*

Francesco Vidoli, "Roma Tre" University, Rome, Italy; Elisa Fusco, “La Sapienza” University, Rome, Italy

*Compind: a Composite indicators functions based on frontiers in R*

Marco Fattore and Alberto Arcagni, "Milano-Bicocca" University, Milan, Italy

*PARSEC – An R package for Partial Orders in Socio-Economics*

**Sept 18th 16.15-17.40, Aula Nievo**

**Session 12: Life-Course, Integration and Wellbeing: Taiwan in Perspective**

Chair: Franca Crippa, "Milano-Bicocca" University, Milan, Italy
Organizer: Ming-Chang Tsai, Academia Sinica, Taipei, Taiwan.

Ruey-Ming Tsay and Li-Hsueh Wu, Tunghai University, Taiwan

*Retiring in Search for Happiness: Retirement Arrangement and Quality of Life in Taiwan*

Chun-Hao Li, Yuan Ze University, Taoyuan City, Taiwan; Shu-Yao Hsu, Kang Ning University, Tainan City, Taiwan

*Acculturation and Well-being of Immigrant Brides in Taiwan*
Ji-Ping Lin, Academia Sinica, Taipei, Taiwan


Sept 18th 17.40-18.00, Archivio Antico: Closing Conference

Sept 18th 18.00-19.00: Cocktail and guided tour to Palazzo Bo