



EURO Working Group on Multicriteria Decision Aiding

April 10-12, 2025

Aula Baratto, Ca' Foscari University of Venice

Programme

Updated: April 4th, 2025





Thursday, April 10th, 2025

| 12.00-13.00 | Registration and Lunch |
|--------------------------|--|
| 13.00-13.15 | Opening Session |
| 13.15-14.15 | Keynote Lecture - Michalis Doumpos, Incorporating ESG Factors in Multicriteria Portfolio Optimization: An Overview and Empirical Evaluation |
| 14.15-16.00 | Session 1: Multicriteria Approaches to Financial Portfolio Optimization |
| 16.00-16.30 | Coffee Break |
| 16.30-18.00 | Session 2: Sustainable Development and Urban Planning with MCDA |
| Friday, April 11th, 2025 | |
| 9.00-11.00 | Session 3: Recent Trends in MCDA for Building Composite Indicators |
| 11.00-11.30 | Coffee Break |
| 11.30-12.30 | Round Table - Multicriteria Decision Aiding in Portfolio Selection |
| 12.30-13.30 | Lunch |
| 13.30-14.00 | Group activities |
| 14.00-16.00 | Session 4: Advancements in MCDA methods and latest applications |
| 16.00-16.30 | Coffee Break |
| 16.30-18.00 | Session 5: Multicriteria Decision Aiding in Public Policy and Governance |

Saturday, April 12th, 2025

Starting time: 9.30 am **Duration**: Approximately **5 hours**

Meeting point: San Giobbe Ferry Terminal

(Google Maps Coordinates: 45°26'47.3"N 12°19'05.2"E)

Directions from the Train Station: Go to Platform 1 and follow signs for "Uscita San Giobbe - Università". You will arrive at the San Giobbe Economic Campus – the ferry terminal is located just behind the main building.

Itinerary:

- Visit to Murano, including a tour of a glass factory
- Visit to Burano, where we will stop for a typical Venetian aperitivo with Cicchetti and Spritz
- A tourist guide will accompany us throughout the trip





Sessions Programme

<u>Thursday, April 10th, 2025 – Session 1</u> Multicriteria Approaches to Financial Portfolio Optimization

14.15-16.00

Chair: Silvio Giove

The effects of the introduction of volume-based liquidity constraints in portfolio optimization with alternative investments

Antonella Basso, Diana Barro, Stefania Funari and Guglielmo Alessandro Visentin (Ca' Foscari University of Venice)

ELECTRE Tri-BR outranking method within PERTUSATU framework: application to formation of a stock portfolio

Pascal Oberti, Frédéric Leca and Saliha Ozayo (University of Corsica)

Mitigating ESG scores divergence in multi-criteria portfolio decisions: The case study of blue economy **Sofia Baiocco** (Università Politecnica delle Marche), Amelia Bilbao-Terol (Universidad de Oviedo), Mar Arenas Parra (Universidad de Oviedo)

Sustainable Index Tracking

Sebastian Utz (University of Augsburg), Ralph Steuer (University of Georgia), Maximilian Wimmer (University of Regensburg)

Submitted to discussion:

Tracking-based green portfolio optimization

Diana Barro, Marco Corazza and Gianni Filograsso (Ca' Foscari University of Venice)

Multi-objective Portfolio Optimization considering Entropy as Diversification Objective
Fouad Ben Abdelaziz (Neoma Business School), Meriem Hemici and Djaafar Zouache (University Of Bordj Bou Arreridj)

Optimizing Real Estate Portfolios: A Fuzzy MCDA Methodology for Risk and Return Analysis Rubina Canesi and Chiara D'Alpaos, (University of Padova)





Optimising Sustainable Circular Waste Management: A Portfolio Theory Approach Through a Multiple Case Study of Practice and Performance Linkage

Kannan Govindan (Adelaide Business School and Institute for Sustainability Energy and Resources, University of Adelaide), Devika Kannan (Danish Institute for Advanced Study, University of Southern Denmark), Laura Gregersen, Mikkel Stampe Nielsen and Simon Ølholm (Department of Technology and Innovation, University of Southern Denmark)

Integrating Social Multi-Criteria Evaluation into European Commission Impact Assessments: a workflow analysis approach

Nicole Ostlaender (European Commission - Joint Research Centre)

<u>Thursday, April 10th, 2025 – Session 2</u> Sustainable Development and Urban Planning with MCDA

16.30-18.00

Chair: Salvatore Corrente

A dynamic approach to Strong Sustainability: theoretical foundations for practical application

Beatrice Mecca and Isabella M. Lami (Politecnico di Torino), Matteo Brunelli (Università di Trento)

Bridging strategy and practice: the IBTool as an innovative multicriteria system for sustainable urban transformation

Francesca Abastante (Politecnico di Torino), Giuliano Poli (Università Federico II Napoli), Francesco Piras (Università degli studi di Cagliari)

Exploring the potential of multi-objective optimization for the co-construction and co-evaluation of urban transformation alternatives

Caterina Caprioli, Marta Bottero and Elena De Angelis (Politecnico di Torino)

Towards Excellence: Developing a Multidimensional Benchmarking Framework for Assessing Success in Mobility as a Service (MaaS) Systems

Davide De Vita, Nunzia Carbonara, Antonio Messeni Petruzzelli, Michele Ottomanelli and Marco Locurcio (Polytechnic University of Bari)





Assessing Multi-Dimensional Impacts in Urban Regeneration: A Decision-Support Framework for Public Building Reuse

Marta Bottero, Giulio Cavana e Federico Dell'Anna (Politecnico di Torino), Danny Casprini e Alessandra Oppio (Politecnico di Milano), José Rui Figueira (Instituto Superior Técnico de Lisboa)

Beyond Financial Metrics: A MCDA-Based Methodology for Social Value Assessment in Portfolio Selection

Alessandra Oppio, Marta Dell'Ovo (Politecnico di Milano)

Friday, April 11th, 2025 – Session 3 9.00-11.00

Recent Trends in MCDA for Building Composite Indicators

Chair: Marco Corazza

Analysing Human Development Index with a MultiCriteria Decision Aiding Perspective **Meltem Öztürk** (Universite Paris Dauphine)

Environmental, social, and governance evaluation for European small and medium enterprises: A multicriteria approach

Marco Corazza, Diana Barro, Gianni Filograsso (Ca' Foscari University of Venice)

An enhanced simulation-based approach for multicriteria evaluation problems of SME's performance Maria Rosaria Pappalardo and Silvia Angilella (University of Catania), Michalis Doumpos and Constantin Zopounidis (Technical University of Crete)

Identifying ties in countries' Al capability ranking through the Kullback-Leibler Divergence

Renata Pelissari (Universidade Presbiteriana Mackenzie), Betania Campello (Universidade Estadual de Campinas), Guilherme Dean Pelegrina (Universidade Presbiteriana Mackenzie), Leonardo Tomazeli Duarte (Universidade Estadual de Campinas)

An Explainable Composite Indicator Based on Decision Rules

Silvano Zappalà, Salvatore Corrente and Salvatore Greco (University of Catania), Roman Słowiński

(Poznan University of Technology and Polish Academy of Science)





Multidimensional evaluation of deprivation through Expert judgement

Luca Anzilli (University of Salento), Marta Cardin and Silvio Giove (Ca' Foscari University of Venice)

Modelling confidence and optimism in Stochastic Multicriteria Acceptability Analysis

Sally Giuseppe Arcidiacono, Salvatore Corrente and Salvatore Greco (University of Catania)

A methodology to construct a reduced Composite Indicator for Digital Divide: An application to the Digital Economy and Society Index (DESI)

Giuseppe Bruno, Antonio Diglio, Carmela Piccolo, Eduardo Pipicelli (University of Naples Federico II)

Friday, April 11th, 2025 – Session 4

14.00-16.00

Advancements in MCDA methods and latest applications

Chair: Nadia Papamichail

The Prison Life Index: Applying ELECTRE TRI for Ordinal Indicator Aggregation with Limited Compensation

Lola Martin Moro (Conservatoire national des Arts et Métiers), Meltem Öztürk Escoffier (Université Paris Dauphine)

Multicriteria Decision Aiding with Deck of the Cards based Ordinal Regression

Salvatore Greco (University of Catania), Maria Barbati (Ca' Foscari University of Venice), Isabella M.Lami (Politecnico di Torino)

A multicriteria Group Decision Making framework for the evaluation of the sustainability and resilience of the long-term Swiss energy pathways

Eleftherios Siskos (Technical University of Crete), Evangelos Panos, River Huang and Peter Burgherr (Paul Scherrer Institute)

A Decision Support Framework for Evaluating Policy Strategies

Nadia Papamichail (The University of Manchester), Peter Strong, Aditi Shenvi, Xuewen Yu and Jim Q Smith (University of Warwick)





Generalising the distance-induced ordered weighted averaging (DIOWA) operators Sajid Siraj (University of Leeds), Chengju Gong (Harbin Engineering University)

An improvement of the arithmetic Heuristic Rating Method

Jacek Szybowski and Konrad Kułakowski (AGH University of Krakow)

Towards an MCDA approach for supporting sustainable decision making in agri-food production processes

Nikos Tsotsolas (University of West Attica), Eleni Koutsouraki and Aspasia Antonakaki (Green Projects SA)

Deck of Cards method for Hierarchical, Robust and Stochastic Ordinal Regression Silvano Zappalà, Salvatore Corrente and Salvatore Greco (University of Catania)

<u>Friday, April 11th, 2025 – Session 5</u> Multicriteria Decision Aiding in Public Policy and Governance

Chair: Giuseppe Bruno

Multi-Criteria Decision-Making/Aiding in Business-State Relations: A Systematic Literature Review Sarah Ben Amor, Ali Esmaeili Aftabdari and José Carlos Marques (University of Ottawa)

Assessing Citizen Acceptance for Wind Energy in Central and Southern Europe: A Multi-Regional, Multicriteria Analysis

River Huang (Paul Scherrer Institute), Eleftherios Siskos (Technical University of Crete), Peter Burgherr (Paul Scherrer Institute/ETH Zurich)

Is the C-K theory useful for transformation of health systems?

Christine Huttin (Aix-Marseille University and Endepusresearch)

The weight of an economic criterion in the multi-criteria evaluation (ELECTRE methods) of agroforestry systems in south-west France

Roxane - Sybile Simamindra, Odile Phelpin and Francis Macary (INRAE, UR ETTIS)





Lessons from Empirical Applications of Social Multi-Criteria Evaluation: A Systematic Literature Review

Egle Basyte Ferrari (Joint Research Centre - European Commission)

A comparative assessment of the main ESG rating frameworks

Giuseppe Bruno (University of Naples Federico II), Manuel Cavola (University Pegaso), Anna Del Balzo Eduardo Pipicelli (University of Naples Federico II)

Integrating Cost-Benefit and Multi-Criteria Decision Analysis in Digital Twin-based decision support for Positive Energy Districts: a case study

Franco Corti (University of Padova)

Incomparable AHPSort

Alessio Ishizaka and Arash Moheimani (Neoma Business School), Gerarda Fattoruso (University of Foggia), Salem Chakhar (University of Portsmouth)