09:00 AM - 11:00 AM
Transportation I
Chair: Martina Fischetti

09:00 AM  Maurizio Bruglieri – Optimizing a real-time carpooling service
09:20 AM  Giusy Macrina – Bundles generation and pricing in crowdshipping
09:40 AM  Amparo Mármol – A pick-up rule for sharing transportation costs in itinerant events
10:00 AM  Siniša Vilke – Decision support system in urban traffic management

11:30 AM - 01:00 PM
Transportation II
Chair: Cristiano Cervellera

11:30 AM  Francesca Vocaturo – Graph Partitioning in Public Transport
11:50 AM  Maksim Lalić – Assisting Passengers on Rerouted Train Service Using Vehicle Sharing System
12:10 PM  Gabriella Stecco – Scheduling and Routing of AGVs: solving industrial applications using Constraint Programming
12:30 PM  Cristiano Cervellera – Receding-horizon dynamic optimization of port-city traffic interactions over shared urban infrastructure

02:30 PM - 03:30 PM
Plenary Lecture
Chair: Filippo Visintin

02:30 PM  Maria Paola Scaparra – Leveraging OR to build more sustainable, resilient, and equitable communities in Southeast Asia

03:40 PM - 05:00 PM
Transportation III
Chair: Jean-Paul M. Arnaout

03:40 PM  Antonio Napoletano – Vehicle routing at work: a real-world implementation and case studies
04:00 PM  Xuan Ren – The Truck and Drone Routing with Delivery and Optional Pickups
04:20 PM  Jean-Paul M. Arnaout – A Preliminary Assessment of the Traffic Operations of Connected and/or Autonomous Vehicles

05:00 PM - 05:30 PM
Closing Session
09:00 AM - 11:00 AM
Continuous and Multiobjective optimization II
Chair: Annarita De Maio

09:00 AM  Milica Jovanović-Vujatović – Econometrics analysis of multidimensional urban poverty determinants
09:20 AM  Bo Peng – Conic formulation of QPCCs applied to truly sparse QPs
09:40 AM  Emanuele Pizzari – Bilevel Formulations for Municipal Waste Management
10:00 AM  Marco Premoli – Comparing digital and quantum annealing heuristics: the cardinality constrained quadratic knapsack case
10:20 AM  Annarita De Maio – Optimization techniques for the risk mitigation in the hazardous material truck transportation

11:30 AM - 01:00 PM
Continuous and Multiobjective optimization III
Chair: Brilli Andrea

11:30 AM  Serena Fugaro – Multi-Objective Covering Location Problems with advanced connectivity features and zonal requirements: Exact and Matheuristic approaches
11:50 AM  Aly-Joy Ulusoy – Multi-objective design-for-control of water networks with global bounds
12:10 PM  Andrea Brilli – An interior point method for nonlinear constrained derivative-free Optimization

03:40 PM - 05:00 PM
Applications of OR VI
Chair: Roberto Musmanno

03:40 PM  Stanislav Fedorov – Machine Learning heuristic for Variable Cost and Size Bin Packing Problem with Stochastic Items
04:00 PM  Mikele Gajda – Last-mile delivery with vans and autonomous robots: an analysis on the impact of the return policy
04:20 PM  Roberto Musmanno – Selection of Cultural Sites via Optimization
09:00 AM - 11:00 AM
Applications of OR V
Chair: Roberto Roberti

09:00 AM  Mirko Mucciarini – Demand Forecasting Methods: A Case Study in the Italian Processed Meat Industry
09:20 AM  Roberto Ronco – A new efficient heuristic for the Automatic Scene Detection Problem
09:40 AM  Maria Trnovska – A unified approach to data envelopment analysis models
10:00 AM  Lionel Amodeo – Capacitated Disassembly Lot-Sizing Problem with Disposal Decisions for Multiple Product Types with Parts Commonality
10:20 AM  Roberto Roberti – Anticipatory Time Window Assignment for Next-Day Service Routing

11:30 AM - 01:00 PM
Supply Chains and Inventory I
Chair: Giuseppe Stecca

11:30 AM  Matteo Cosmi – Mathematical programming models for managing the profitability-sustainability trade-off in complex chemical value chains
11:50 AM  Giorgio Romanin Jacur – Generalized Model of a Production System with Fixed Supplies and Deliveries
12:10 PM  Giuseppe Stecca – A model and a solution approach for optimal green investment in a two stage supply chain
12:30 PM  EP Mezatio – Design forward and reverse closed-loop supply chain to improve economic and environmental performances

03:40 PM - 05:00 PM
Supply Chains and Inventory II
Chair: Tatiana Grimard

03:40 PM  Saba Siadati – A Two-echelon Time-dependent Green Location-Routing Problem
04:00 PM  Tatiana Grimard – Supply chain design and cost allocation in a collaborative three-echelon supply network: A literature review
09:00 AM - 11:00 AM
Applications: Health Care
Chair: Valentina Bonomi

09:00 AM
Roberto Bargetto – A branch-and-price-and-cut algorithm for operating room scheduling under human resource constraints

09:20 AM
Mirko Cavecchia – A Facility Location Problem to support Helicopter Emergency Medical Services

09:40 AM
Alessandro Gobbi – Nurse Routing Problem with Incompatible Services and Minimum Demand: An ALNS+Kernel Search solution approach

10:00 AM
Valentina Bonomi – A Two-Stage Stochastic approach for the Integrated Multi-Period Combinatorial Auction and Nurse Routing Problem

11:30 AM - 01:00 PM
Best AIROYoung Dissertation 2022
Chair: Alice Raffaele

11:30 AM
Anna Livia Croella – Real-time Train Scheduling: Reactive and Proactive Algorithms for Safe and Reliable Railway Networks

11:50 AM
Daniel Faccini – Models and Approximations for Optimization Problems under Uncertainty with Applications to Support Vector Machine and Revenue Management

12:10 PM
Serena Fugaro – Optimizing and Reoptimizing: Tackling Static and Dynamic Combinatorial Problems

12:30 PM
Matteo Lapucci – Theory and Algorithms for Sparsity Constrained Optimization Problems

03:40 PM - 05:00 PM
Discrete Optimization IV
Chair: Federico Della Croce

03:40 PM
Martina Cerulli – The collapsed k-core problem

04:00 PM
Federico Della Croce – Operating rooms scheduling with a shared resource: a red-blue knapsack modeling approach
09:00 AM - 11:00 AM
OML, Optimization for machine learning II
Chair: Vassilis Apidopoulos

09:00 AM Lionel Tondji – Faster Randomized Block Sparse Kaczmarz by Averaging
09:20 AM Cheik Traoré – Asynchronous parallel block-coordinate forward-backward algorithm
09:40 AM Cristian Vega – Iterative regularization for convex regularizers with activation onto a priori information
10:00 AM Mouna Gharbi – GPU-based Implementations of MM Algorithms. Application to Spectroscopy Signal Restoration
10:20 AM Vassilis Apidopoulos – Iterative regularization in classification via hinge loss diagonal methods

11:30 AM - 01:00 PM
MLO4EMD, Machine learning-based optimization for extreme metamaterials design
Chair: Giorgio Gnecco

11:30 AM Amir Darabi – Designing a broadband GRIN lens through a deep learning based data-driven method
11:50 AM Danilo Macciò – Voronoi recursive binary trees for the optimization of nonlinear functionals
12:10 PM Giorgio Gnecco – On dispersion curve coloring

03:40 PM - 05:00 PM
Machine Learning II
Chair: Luca Bravi

03:40 PM Federico D’Onofrio – Maximum Margin Optimal Classification Trees
04:00 PM Luca Bravi – GPS data mining to infer fleet operations for personalised product upselling