



EUROYoung 2025 Program

Wednesday, October 15

Registration

12:20 – 12:40

Opening

12:40 – 13:10

Session: Uncertain Optimization

13:10 – 14:50

Session Chair: Antonio Diglio

13:10 – 13:30

Federica Donnini

On K-adaptability for two-stage stochastic programs

13:30 – 13:50

Hossein Babazadeh

Power Swaps: A Coordination Mechanism for Operation of Jointly Owned Hydropower Reservoirs

13:50 – 14:10

Simon Stevens

A Branch-and-Cut Approach for Decision-Dependent Robust Optimization Problems

14:10 – 14:30

Xuan Truong Dinh

Enhancing Multi-Period, Multi-Commodity, Multi-Modal Network Flow Optimization in the Mekong Delta

Coffee Break

14:30 – 15:00

Plenary

15:00 – 16:00

Session Chair: Marta Baldomero Naranjo

15:00 – 16:00

Martin Schmidt

A Gentle and Incomplete Introduction to Bilevel Optimization

Short Break

16:00 – 16:10

Session: Location

16:10 – 17:30

Session Chair: Thomas Byrne

16:10 – 16:30

Isabel Wiemer

Enhancing Fairness in Emergency Medical Service: Single- and Bi-Objective Model Formulations

- 16:30 – 16:50** **Felix Rauh**
Dynamic Programming and Block-Cut Tree Decompositions for a Maximum Covering Location-Network Design Problem
- 16:50 – 17:10** **Ricardo Gázquez**
Incorporation of Regional Preferences in Facility Location: Insights into Efficiency and Satisfaction Trade-offs
- 17:10 – 17:30** **Thomas Byrne**
Conditional Facility Location Problems with Continuous Demand and a Rapid Transit Line

Session: Routing

17:30 – 18:30

Session Chair: Eduardo Pípicelli

- 17:30 – 17:50** **Julien Darlay**
Computing dual bounds of set-based models using column elimination in Hexaly
- 17:50 – 18:10** **Chiara Maragò**
Optimizing Cruise Ship Itineraries: A Sustainable Perspective
- 18:10 – 18:30** **Vid Tomljenovic**
Solving a Multi-Depot Multi-Vehicle Inventory Routing Problem using Column Generation and Branch-and-Price

Welcome Dinner

19:30 – 21:30

Pizzeria Diego Vitagliano

Thursday, October 16

Session: Machine Learning I

08:30 – 09:30

Session Chair: Sebastian Merten

- 08:30 – 08:50** **Daan Otto**
Coherent Local Explanations for Mathematical Optimization
- 08:50 – 09:10** **Marica Magagnini**
Multiple Disperse (generalized) Linear Models
- 09:10 – 09:30** **Sebastian Merten**
Interpretable Surrogates for Optimization

Session: Machine Learning II

09:30 – 10:30

Session Chair: Paula Segura Martínez

- 09:30 – 09:50** **Lorenzo Saccucci**
The Potential of Large Language Models in Solving Optimization Problems: An Empirical Study
- 09:50 – 10:10** **Ilaria Ciocci**
Margin Optimal Regression Trees
- 10:10 – 10:30** **Paula Segura Martínez**
New mathematical optimization models for clusters interpretability

Coffee Break

10:30 – 11:00

Plenary

11:00 – 12:00

Session Chair: Andrea Mancuso

- 11:00 – 12:00** **Maria Grazia Speranza**
Optimization in transportation and logistics

Short Break

12:00 – 12:10

Session: Bilevel Optimization

12:10 – 13:30

Session Chair: Francisco Temprano García

- 12:10 – 12:30** **Alberto Torrejon**
The Measure of Everything, a flexible modeling framework for combinatorial problems
- 12:30 – 12:50** **Riccardo Tomassini**
Equilibrium selection in oligopolistic market
- 12:50 – 13:10** **Martina Gherardi**
A bilevel revenue adequate generation expansion problem with hybrid complementarity condition
- 13:10 – 13:30** **Francisco Temprano García**
A fresh view on the Security Games Problem

Lunch Break

13:30 – 14:30

Plenary

14:30 – 15:30

Session Chair: Adriano Masone

14:30 – 15:30

Dolores Romero Morales

Local Explainability in Machine Learning: A collective framework

City Tour

17:30 – 19:30

Meeting point: Montesanto Station

Social Dinner

20:30 – 22:30

La Bersagliera

Friday, October 17

Session: Advanced Optimization Techniques for Complex Systems

08:30 – 09:30

Session Chair: Bárbara Rodrigues

- 08:30 – 08:50** **Farzaneh Safari**
Inverse Cauchy problem in the framework of an RBF-based meshless technique and trigonometric basis functions
- 08:50 – 09:10** **Ties Schalijs**
Structure-Aware Heuristic Improvement via Policy Iteration
- 09:10 – 09:30** **Bárbara Rodrigues**
Combined Scenario Reduction and Discretization for Time Series Data

Session: Industrial Applications I

09:30 – 10:30

Session Chair: Christian Truden

- 09:30 – 09:50** **Nandan Kumar Singh**
Optimal Investment in Resiliency in Presence of Spot Market Demand: A Generalized Distribution Approach
- 09:50 – 10:10** **Vittoria Crotti**
OR and ML techniques supporting security service companies
- 10:10 – 10:30** **Christian Truden**
Service Network Design with Fleet and Emissions Management at Scale

Coffee Break

10:30 – 11:00

Plenary

11:00 – 12:00

Session Chair: Alan Osorio Mora

- 11:00 – 12:00** **Maurizio Boccia**
Exact and ML-guided Matheuristic approaches for a Truck-and-Drone delivery problem

Short Break

12:00 – 12:10

Session: Game Theory and Combinatorial Optimization

12:10 – 13:30

Session Chair: Carmine Sorgente

- 12:10 – 12:30** **Alejandro Bernárdez Ferradás**
Dirichlet Values for Balanced Games
- 12:30 – 12:50** **Mariagrazia Cairo**
Bi-Objective Minimum Spanning Tree Problem: a comparison between a distributed and a parallel approach
- 12:50 – 13:10** **Alberto Boggio Tomasaz**
On the Construction of Resilient Samples for Binary Interdiction
- 13:10 – 13:30** **Carmine Sorgente**
Branch-and-cut algorithms for colorful components problems

Lunch Break		13:30 – 14:30
Panel Session		14:30 – 15:30
		<i>Session Chair: Laura Davila Pena</i>
14:30 – 15:30	Panel <i>Challenges and Decisions that Shape Academic Careers in Operational Research</i>	
Session: Industrial Applications II		15:30 – 16:30
		<i>Session Chair: Matteo Cosmi</i>
15:30 – 15:50	Sayeh Fooladi Mahani <i>Optimizing electric carsharing systems for sustainable mobility and grid load management</i>	
15:50 – 16:10	Paula Terán Viadero <i>Exact and Heuristic Approaches for the 2D Cutting Stock Problem with variable-sized stock</i>	
16:10 – 16:30	Çiya Aydoğan <i>Tail Assignment Problem with Hour-to-Cycle Ratio Constraints: A Branch and Price Algorithm</i>	
16:30 – 16:50	Matteo Cosmi <i>The profitability-sustainability trade-off in complex chemical value chains under product-specific carbon footprint constraints</i>	
Coffee Break		16:50 – 17:20
Session: Scheduling Problems		17:20 – 19:00
		<i>Session Chair: Martina Doneda</i>
17:20 – 17:40	Alex Barrales-Araneda <i>A Heuristic Algorithm for Sequential Timetabling and Electric Vehicle Scheduling in Public Transport</i>	
17:40 – 18:00	Roberto Maria Rosati <i>Multi-Neighborhood Search for the AGV Scheduling Problem with Battery Constraints</i>	
18:00 – 18:20	Miguel Chastre <i>Joint Optimization for the Scheduled Joint Replenishment Problem</i>	
18:20 – 18:40	Martina Doneda <i>A data-driven tool for operating rooms advance scheduling</i>	
Closing		18:40 – 19:00
Farewell Cocktail <i>Hotel Nuvò</i>		20:00 – 22:00