

Monday, July 24

Period	Session	Session Title	Session Chair	Presenting Author	Presentation Title	Room
9:00-10:00	Plenary I		Ana Luisa Custódio	Marc Teboulle	Lagrangian Based Methods for Nonsmooth Composite Minimization	23.1.5
10:30 -12:10	MA1	Routing I	M. Cândida Mourão	Francisco Canas	Node Based Compact Formulations for the Hamiltonian p-Median Problem	23.1.5
				Teresa Corberán	The Min Max Multi-Trip Location Arc Routing Problem	
				Matilde Nunes	Designing Routes for High and Medium Voltage Overhead Line Inspection and Bases Assignment	
				Tran Thi Thoi	A particle swarm optimization algorithm for solving technician routing and scheduling problem	
	MA2	Optimization for data analysis	Jorge Orestes Cerdeira	M. Rosário Oliveira	Interval principal component analysis as a maximization problem	23.3.10
				Marcos Raydan	An augmented Lagrangian approach for cardinality constrained minimization applied to variable selection problems	
				Maria João Martins	A Quadratic Unconstrained Binary Optimization model for variable selection and clustering	
				Jorge Orestes Cerdeira	Tukey data depth: exact and heuristic approaches and an application to network analysis	
	MA3	Derivative-free Optimization I	Geovani Grapiglia	Kwassi Joseph Dzahini	A stochastic derivative-free trust-region method in random subspaces	23.3.9
				Wenqi Zhu	Tensor Methods for Nonconvex Optimization	
				Zaikun Zhang	PRIMA: Reference Implementation for Powell's Methods with Modernization and Amelioration	
				Geovani Nunes Grapiglia	Revisiting the use of finite-differences in DFO	
	MA4	Applications	Ricardo Saldanha	Georg Brandstätter	Optimal matching of drivers and passengers in a commuter ride sharing setting	23.3.5
				Ricardo Saldanha	Optimising personalized crew rosters with respect to fairness and satisfaction of weighted preferences	
				Miguel Alves Pereira	Decision analysis for the Portuguese energy storage strategy: A Choquet multi-criteria preference aggregation framework	
MA5	Multi-Objective Optimization	Dalila Fontes	Gonçalo Lopes	Greedy hypervolume representation in higher dimensions	23.3.4	
			João Almeida	A Multi-Objective Mixed Integer Linear Programming Model for Thesis Defence Scheduling		
			Dalila Fontes	Multi-Objective Optimization of Job Shop Scheduling with Instant Peak Power Constraints		

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Period	Session	Session Title	Session Chair	Presenting Author	Presentation Title	Room
13:50-14:50	Plenary II		Agostinho Agra	Melvyn Sim	The Analytics of Robust Satisficing: Predict, Optimize, Satisfice, then Fortify	23.1.5
15:00-16:15	MB1	Routing with environmental concerns	Marta Pascoal	João Martins	A Robust Metaheuristic to Solve the Robust Pollution-Routing Problem with Uncertain Demand and Travel Time	23.1.5
				Mário Leite	Smart and Parallel General Variable Neighborhood Search for the Pollution-Routing Problem	
				Marta Pascoal	Algorithms for the semi-obnoxious bi-objective path problem	
	MB2	Optimization	Pablo Guerrero García	Adrian Göß	Norm-induced Cuts: Optimization with Lipschitzian Black-box Functions	23.3.10
				Corrado Coppola	Block Decomposition Minibatch Algorithms for large-scale non-convex finite sum optimization	
				Pablo Guerrero García	On Augmented Lagrangeans in phase I	
	MB3	Forest Management	Miguel Constantino	Sandra Silva	A GIS-based multicriteria approach for evaluating potential locations of forest biomass transfer stations in the Alto Minho region, Portugal	23.3.9
				Miguel Constantino	Road Network Optimization in Smallholding Forests.	
				Marta Mesquita	A comparison of different solution approaches to design forest road networks and plan timber transportation	
	MB4	Optimal Control and differential equations	Nika Gorgodze	Renier Mendoza	Optimal control of infectious diseases using a multi-operator differential evolution algorithm	23.3.5
				Phridon Dvalishvili	On the optimal control of one market relation model considering variable delay	
				Nika Gorgodze	On the existence of an optimal initial data for one class of neutral functional differential equation with several delays and two types controls	
	MB5	Portfolio Optimization	José Rui Figueira	Josh Fogg	Portfolio Optimization for Genetic Selection	23.3.4
				José Rui Figueira	A multiple criteria methodology for prioritizing and selecting portfolios of urban projects	
				Paula Sarabando	Investment portfolio: how to help individual investors	

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Period	Session	Session Title	Session Chair	Presenting Author	Presentation Title	Room
16:45-18:25	MC1	Integer Programming I	Claudia Archetti	Jesus O. Cunha	Valid inequalities for the uncapacitated three-level lot-sizing and replenishment problem with a distribution structure	23.1.5
				Tolga Bektaş	Augmentation search for integer programmes defined on polyhedra	
				Katrin Halbig	Dynamic Partition Search - A Primal Heuristic for MIPs exploiting Decomposition Information	
				Claudia Archetti	Mathematical Programming Formulations for the Collapsed k-Core Problem	
	MC2	Home Care and Home Delivery	Eliana Costa e Silva	Daniele Manerba	Redelivery options evaluation in Attended Home Delivery with customer availability profiles	23.3.10
				Abdalrahman Algendi	Optimizing Home Health Care Workforce Scheduling and Routing with Multiple Shifts and Emergency Caregivers	
				Dario Vezzali	A Survey of Attended Home Delivery and Service Problems with a Focus on Applications	
				Eliana Costa e Silva	Better Planning, Better Service: Improving Non-urgent Transport on a Portuguese Fire Station	
	MC3	Optimality and Duality in Mathematical Programming	Miguel Goberna	José Vicente-Pérez	On the strong Slater condition of linear systems with an evenly convex constraint set	23.3.9
				Maria Dolores Fajardo	On Fenchel c-conjugate dual problems for DC optimization: characterizing weak, strong and stable strong duality	
				Miguel A. Goberna	Duality and limiting formulas for convex infinite optimization problems	
	MC4	Forest and Fire Optimization	Filipe Alvelos	Isabel Martins	Integrating forest and fire management through a novel simulation-based optimization approach	23.3.5
				Filipe Alvelos	Fire suppression MIP models with resources movement	
Francisco Marques				Modelling the behaviour of wind: a literature review		

Tuesday, July 25

Period	Session	Session Title	Session Chair	Presenting Author	Presentation Title	Room
9:00-10:00	Plenary III		Valério de Carvalho	Jacques Desrosiers	Cycles, Pricing, and Pivots	23.1.5
10:30 - 12:10	TA1	Routing II	Daniel Santos	Daniel Santos	The Multi-Depot Family Traveling Salesman Problem and Clustered Variants: Mathematical Formulations and Branch-&-Cut Based Methods	23.1.5
				Isaac Plana	Analysis of a New Formulation for the Rural Postman Problem and the General Routing Problem	
				Alessandro Gobbi	Recourse Strategies for a Stochastic Vehicle Routing Problem with Divisible Deliveries and Pickups	
				Hernán Lespay	Territory Design for Multi-Period Vehicle Routing Problem with Time Windows	
	TA2	Renewable energy	Adelaide Cerveira	Adelaide Cerveira	Optimizing wind farm cable routing under uncertainty	23.3.10
				Luciana Yamada	Optimal design of hybrid renewable energy systems	
				Luis Roque	A Biased Random Key Genetic Algorithm to Approach the Kite Wind Energy Farms Layout Problem	
				Luciana Casacio	Reinforcement Learning for maintenance policies in PV farms	
	TA3	Location	Isabel Correia	Edoardo Fadda	A tailored branch-and-Benders-cut approach for Backup Covering Problems	23.3.9
				Alfredo Marín	Revisiting the Single Allocation Hub Location Problem	
				Isabel Correia	A dynamic distribution network problem with flexible conditions for short-term location decisions	
				Youssef Boulaksil	Optimizing modern retailers' location in emerging markets' megacities	
	TA4	Dynamic Systems	Elvira Hernández	Om Kalthoum Wanassi	Power Series Solutions to Fractional Dynamic Optimization Problems	23.3.5
				Orlando Gomes	The Emergence of Chaos in Productivity Distribution Dynamics	
				Elvira Hernández	About set-valued dynamical systems	
	TA5	Network Efficiency	Franklin Fomeni	Marlene Brás	Cost Efficiency of Water Supply Systems Through Optimization Methodologies	23.3.4
Julia Grübel				Robust Network Design for Nonlinear Potential-Based Flows		
Franklin Fomeni				A network optimization model for water treatment and distribution network		

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Period	Session	Session Title	Session Chair	Presenting Author	Presentation Title	Room
13:50-14:50	Plenary IV		Luis Gouveia	Ivana Ljubic	Bilevel Optimization Under Uncertainty: Challenges and Opportunities	23.1.5
15:00-16:15	TB1	Derivative-free Optimization II	Ana Luisa Custódio	Andrea Brilli	Mixed interior-exterior point method for non-linear black-box optimization	23.1.5
				Everton Silva	A Direct Multisearch Inexact Restoration Filter Method for Biobjective Optimization	
				Sébastien Kerleau	Positive k-spanning sets and their use in derivative free optimization	
	TB2	Automobile and traffic Optimization	Ana Maria Rocha	Atmani Zoubir	Optimization of automobile crash computation	23.3.10
				Ana Maria Rocha	Traffic light optimization: a case study	
				Eloisa Macedo	Eco-friendly driver actions: an optimization gear-shift management approach	
	TB3	Optimization under Uncertainty	Kevin-Martin Aigner	Eligius Hendrix	Markovian view on population based stochastic GO algorithms	23.3.9
				Stef Baas	A Sampling-based Gittins Index Approximation	
				Kevin-Martin Aigner	Data-driven Distributionally Robust Optimization over Time	
	TB4	Integer Programming II	Valério de Carvalho	Maria Teresa Godinho	Finding K dissimilar paths: Single-commodity and discretized flow formulations	23.3.5
				Daniela Scherer dos Santos	Ensuring connectedness for the Maximum Quasi-Clique and Densest k-Subgraph problems	
				José M. Valério de Carvalho	Arc Flow Formulations Based on Dynamic Programming: Theoretical Foundations and Applications	
	TB5	Scheduling	Ana Raquel Xambre	Yannik Zeiträg	A hyper-heuristic approach to solve lot-sizing and job shop scheduling problems using coevolutionary genetic programming	23.3.4
				António Vieira	An integrated simulation-based reinforcement learning approach for a bi-objective dynamic job shop scheduling problem	
				João Dionisio	Long-term production-maintenance scheduling in complex machinery	

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Period	Session	Session Title	Session Chair	Presenting Author	Presentation Title	Room
16:45 - 18:25	TC1	Routing III	Raquel Bernardino	Ana Rodrigues	A Multi-Objective Evolutionary Algorithm and Sectorization Approach for Last-Mile Delivery	23.1.5
				Ana Raquel Pena de Aguiar	An iterated local search algorithm for a home social care problem with team scheme selection	
				Sofia Henriques	Heuristics for the Black and White Travelling Salesman Problem	
				Mariana Ribeiro	Meta-heuristics for the directed profitable rural postman problem with incompatibility constraints	
	TC2	Energy management	Flávia Barbosa	Mariam Sangare	How to efficiently decentralize energy communities management?	23.3.10
				Ibrahim Abada	When market incompleteness is preferable to market power. Insights from power markets.	
				Flávia Barbosa	Defining weights to aggregate HPP health indicators	
				Nena Batenburg	Infrastructure planning for coupled energy sectors	
	TC3	Location and supply chain design	Rui Borges Lopes	João Pires Ribeiro	Optimisation Model for Sustainable and Resilient Supply Chain Design under Uncertainty with CO2 Monetisation	23.3.9
				Natalia Velastín Osorio	Sustainable Hydrogen Supply Chain Design based on a Multi-Objective Optimization approach. The case of seaports in Chile	
				Maria Lopes	Multi-level Hierarchical Location-Allocation Model for a Healthcare Facility Network Problem	
				Dilek Günneç	Multi-Period Capacitated Mobile Facility Location Problem with Mobile Demand: Aiding Refugees on the Move	
	TC4	Infinite and Semi-infinite Optimization	Tatiana Tchemisova	Eloisa Macedo	Regular or not: testing the Slater condition on SDO problems	23.3.5
				Tatiana Tchemisova	Uniform LP duality in Copositive Optimization	
				Paula Amaral	Copositivity detection using DNN decomposition	
	TC5	Health Care	Maddalena Nonato	Guilherme Afonso	Dealing with uncertainty in healthcare performance assessment: a fuzzy network-DEA approach with undesirable outputs	23.3.4
				Mariana Peyroteo	Estimating the Value of Digital Health Services: The case of Multimorbidity Management in a Primary Health Care Center in Portugal	
				Maddalena Nonato	Network-based matheuristics for appointment scheduling in surgery pre-admission testing clinics	

Wednesday, July 26

Period	Session	Session Title	Session Chair	Presenting Author	Presentation Title	Room
9:00-10:00	Plenary V		Cristina Requejo	Miguel Anjos	Optimal Deployment of Electric Vehicle Charging Infrastructure	23.1.5
10:30-12:10	WA1	Routing IV	Ana Paias	Mafalda Ponte	Compact Formulations for the Traveling Salesman Problem with Positional Consistency	23.1.5
				Raquel Bernardino	The Family Capacitated Vehicle Routing Problem	
				Paula Segura	The Drone General Routing Problem with Load-Dependent Costs	
				Imene Benchetta	A new hybrid genetic algorithm for the capacitated vehicle routing problem	
	WA2	Energy and Efficiency	Teresa Cardoso-Grilo	Teresa Cardoso-Grilo	Planning the electrification of a mixed bus fleet: accounting for environmental concerns using a multi-objective optimization model	23.3.10
				Pattanun Chanpiwat	Optimizing the Operational Planning of Residential Stand-Alone Battery Storage Using Stochastic Dual Dynamic Programming	
				Çağatay Iris	Optimising electric vehicles charging and energy management in port microgrids	
				Sayed Mohammad Sajjadi	Multi-Objective Optimization of Energy Generating Devices for Electrical, Heating, and Cooling Demands	
	WA3	Optimization and Machine Learning	Marta Monaci	Marta Monaci	A decomposition algorithm leveraging the SVM structure of Margin Optimal Trees	23.3.9
				Federico D'Onofrio	The Challenge of Embedding Feature Selection in Nonlinear SVMs	
				Giulia Di Teodoro	Opening the black-box: Multivariate Optimal Re-built Tree for ensemble trees and an approximation method for Shapley values	
				Antoine Obled	Cardinality constrained clustering using k-means	
	WA4	Production and Port Management Applications	Filipe Rodrigues	Marco Gonçalves	Two-Dimensional Cutting Problem: Application of Heuristics to Troubleshooting in the Textile Sector	23.3.5
				Ana Moura	A Two-Stage Optimization Method to redesign a layout for a balanced production line: a practical application	
				Filipe Rodrigues	Distributionally robust optimization for the berth allocation problem under uncertainty	
				Celia Jiménez-Piqueras	Exact methods for the premarshalling problem under limited crane time	
WA5	Optimization in Graphs	Allan Sapucaia	Toru Hasunuma	Arbor-Connectivity of the Powers of Trees	23.3.4	
			Allan Sapucaia	On the Balanced Minimum Evolution polytope in the τ -space		
			Sónia Carvalho	Influence Maximization in Erdős-Rényi Networks		
13:30-14:30	Plenary VI		Paula Amaral	Emilio Carrizosa	Counterfactual Explanation Models: A Class of Mathematical Optimization Problems in (Fair) Machine Learning	23.1.5