THURSDAY 8 FEBRUARY 2024

08:45 - 09:30	**Registration and welcome coffee**
	(Corridors of the C-building)

09:30 - 09:45	**Opening session**
	(Room S.C.003)

09:45 - 10:45	**Plenary session - Keynote Dolores Romero Morales**
	"A tour through explainable and fair machine learning with an OR lens"
	(Room S.C.003)

10:45 - 11:15	**Coffee break**
	(Corridors of the C-building)

11:15 - 12:15	**Parallel session TA1** *Forecasting* (Room S.C.001) Chair: Jente Van Belle	**Parallel session TA2** *Packing* (Room S.C.002) Chair: Bart Zondervan	**Parallel session TA3** *Vehicle routing* (Room S.C.101) Chair: Titi Iswari	**Parallel session TA4** *Warehousing* (Room S.C.102) Chair: Aïcha Leroy
	Emilie Grégoire - Towards sustainable power systems: improving battery degradation forecasts	**Jeroen Gardeyn** - Decoupling Geometry from Optimization, an Open-Source Collision Detection Engine for 2D irregular Cutting and Packing problems	**Irfan Mahmutogullari** - Leveraging Contextual Information for Robustness in Vehicle Routing Problems	**Thomas De Lombaert** - The autonomy effect in warehousing – Insights from a large-scale lab experiment
	Auguste Burlats - An Exploration of Exact Methods for Effective Network Failure Detection and Diagnosis	**Francisco Martos-Barrachina** - Solving a tri-objective menu planning problem within the SHARP framework.	**Pieter Deleye** - Advancements in Space Logistics: The Moving Target TSP Paradigm	**Sander Teck** - Deep Reinforcement Learning for the Real-Time Inventory Rack Storage Allocation and Replenishment Problem
	Jente Van Belle - Forecasting Business Process Models	**Bart Zondervan** - Comparing mesh and voxel-based approaches for 3D irregular Cutting and Packing Problems	**Titi Iswari** - A study on the benefits of integrating inventory and routing decisions in a city logistics context	**Aïcha Leroy** - Quantifying deviations in an order picking process through data-driven analysis

12:15 - 13:30	**Lunch**
	(Corridors of the C-building)
	ORBEL board meeting in room "Lessius"

13:30 - 14:50	**Parallel session TB1**	**Parallel session TB2**	**Parallel session TB3**	**Parallel session TB4**
	Language Processing (Room S.C.001)	*Timetabling* (Room S.C.002)	*Optimization* (Room S.C.101)	*Assembly lines and manufacturing* (Room S.C.102)
	Chair: Manon Reusens	*Chair: Dries Goossens*	*Chair: Wim Vanroose*	*Chair: Hannah Verplancke*
	Xiao Wang - Determining well-being during a crisis based on social media data using natural language processing	**Inneke Van Hoeck** - Improving the robustness of a railway timetable in a bottleneck area: a case study in Belgium	**Jo Devriendt** - ManyWorlds: Combinatorial Programming with Functions	**Gül Gündüz Mengübas** - Grid-based tow train routing optimization for efficient part feeding
	Philipp Borchert - Decoding Stock Market Reactions to Earnings Call Dialogues	**David Van Bulck** - Capacitated Examination Timetabling: Multi-Neighbourhood Simulated Annealing	**Bardhyl Miftari** - Parametric optimization with uncertainty on the left hand side of linear programs	**Carlos Miguel** - Mixed-model assembly sequencing with workers' competencies
	James Hinns - Tell Me a Story! Narrative-Driven XAI with Large Language Models	**Karel Devriesere** - Reforming the Belgian youth field hockey leagues with an incomplete round-robin tournament	**Wim Vanroose** - Residual Simplex method with applications in Network Design	**Laurie Boveroux** - A Comparative Study of Methods for Solving the Large Flexible Assembly Job Shop Scheduling Problems
	Manon Reusens - Leveraging zero-shot learning for museum collection data enrichment	**Dries Goossens** - Multi-league sports scheduling		**Hannah Verplancke** - Strategic assembly line feeding decisions

14:50 - 15:20	**Coffee break**
	(Corridors of the C-building)

15:20 - 17:00	**Parallel session TC1**	**Parallel session TC2**	**Parallel session TC3**	**Parallel session TC4**
	Machine learning (Room S.C.001)	*Matheuristics* (Room S.C.002)	*Graph theory* (Room S.C.101)	*Algorithmic design* (Room S.C.102)
	Chair: Alexander Stevens	*Chair: Frank Phillipson*	*Chair: Tom Vancaeyzeele*	*Chair: Kenneth Sörensen*
	Joel Ong - CurveMMoE: A Deep Multi-Task Learning with Multi-Gate Mixture of Experts Approach for Trading Commodity Futures Curves	**El Mehdi Er Raqabi** - An Efficient Decomposition Matheuristic for the Unit Commitment Problem with Power Stability Constraints	**Tibo Van den Eede** - A backtracking algorithm for finding bi-regular cage graphs	**Benoît Depaire** - A research framework for algorithm engineering
	Jakob De Moor - Realistic Model Benchmarking using Synthetic. Data for Prescriptive Process Monitoring	**Bryan Coulier** - A Matheuristic for the Optimal Placement of EV Charging Stations in an Urban Environment	**Matias Daneels** - On the injective chromatic number of a graph	**Julien Darlay** - Hexaly Optimizer 12.5: interval based modeling and perfomance improvements for routing and scheduling problems
	Daan Caljon - A Causal Machine Learning Approach for the Influence Maximization Problem	**Quentin Louveaux** - A mixed-integer-programming formulation for the traveling student problem	**Margot Geerts** - Tuning house network graphs	**Stefano Michelini** - Bandit Algorithms for Neighborhood Selection in Local Search
	Alexander Stevens - Counterfactual Explanations for Predictive Process Analytics	**Frank Phillipson** - Quantum Computing in Logistics and Supply Chain Management - an Overview	**Tom Vancaeyzeele** - Graphical Processing for Fast Survivability Assessments	**Kenneth Sörensen** - 50 years of metaheuristics

17:00 - 18:00	**ORBEL general assembly**
	(Room S.C.002)

19:30	**Conference dinner**

FRIDAY 9 FEBRUARY 2024

09:00 - 09:30	**Welcome coffee**
	(Corridors of the C-building)

09:30 - 10:50	**Parallel session FA1** ***Machine learning*** *(Room S.C.001)* *Chair: Juliana Sanchez Ramirez*	**Parallel session FA2** ***Economics and game theory*** *(Room S.C.002)* *Chair: Boyue Lin*	**Parallel session FA3** ***Collaboration and sharing*** *(Room S.C.101)* *Chair: Maarten Wens*	**Parallel session FA4** ***Vehicle routing*** *(Room S.C.102)* *Chair: Anisha Maharani*
	Yoann Morello - Multi-Task Learning: a method for grouping tasks without training a network. **Mathias Hanson** - Selecting the Optimal Lawful ML Model **Juliana Sanchez Ramirez** - Discerning customer journey types through dynamic modeling of usage Patterns	**Tesfaye Merra** - Public Debt Dynamics, Debt Sustainability and the Role of Debt Relief Initiatives: Empirical from Ethiopia, DSSI & CF **Maaike Vollebergh** - Bankruptcy Problems over Time **Tom Demeulemeester** - Rawlsian Assignments **Boyue Lin** - Algorithmic Solutions for Maximizing Shareable Costs	**Emma Innocente** - Dynamic Assignment for a Crowdshipping Platform **Thomas De Munck** - Dynamic Pricing, Admission and Repositioning in Ride-Sharing Networks **Taki Eddine Harbi** - Metaheuristic algorithm for the design of one-way electric car sharing systems **Maarten Wens** - Determining areas suitable for demand-responsive transit	**Halenur Sahin** - Synchronized Road Unblocking and Relief Material Distribution for Effective Disaster Response **Anisha Maharani** - Heuristic for an integrated nurse routing and rerostering problem in hospital-at-home

11:00 - 12:00	**Parallel session FB1** ***Machine learning*** *(Room S.C.001)* *Chair: Arthur Thuy*	**Parallel session FB2** ***Energy*** *(Room S.C.002)* *Chair: Johan Springael*	**Parallel session FB3** ***Graph theory*** *(Room S.C.101)* *Chair: Bart De Clerck*	**Parallel session FB4** ***Warehousing*** *(Room S.C.102)* *Chair: Birger Raa*
	Shimanto Rahman - A Pre-processing Approach to Strategic High-Value Customer Representation in Churn Prediction **Arthur Thuy** - Cheaper neural network ensembles: a case study in manufacturing	**Matthieu Boucquey** - Prosumer: a flexible optimization tool to support businesses on their decarbonization journey **Lander Mentens** - Navigating Uncertainties for Ens **Guillaume Keutgen** - Application of Reinforcement Learning for the Optimization of Sustainable Energy Systems	**Jarne Renders** - HIST-critical graphs and Malkevitch's conjecture **Jorik Jooken** - Computational bounds for the minimum order of an edge-girth-regular graph **Bart De Clerck** - Comparative Analysis of Graph Randomization: Methods, Pitfalls, and Best Practices	**Stef Lemmens** - Leveraging Decision Trees to Optimize Medicine Stockpile Policies **Mostafa Bahadornia** - A Novel Multi-Objective Model for Data-Driven Scattered Storage Assignment in Warehouses **Birger Raa** - Stacking inbound sheets with scattered arrivals

12:00 - 13:00	**Lunch**
	(Corridors of the C-building)

13:00 - 14:20	**Parallel session FC1**	**Parallel session FC2**	**Parallel session FC3**	**Parallel session FC4**

	Feature selection and parameter tuning (Room S.C.001)	Scheduling (Room S.C.002)	Orbel Award Nominees (Room S.C.101)	Vehicle routing (Room S.C.102)
	Chair: Boris Coquelet	Chair: Leonie Gallois	Chair: Roel Leus	Chair: Lissa Melis
	Isaac Lozano-Osorio - What characteristics define a Good Solution in Social Influence Minimization Problems?	Léa Blaise - Disjunctive scheduling using interval decision variables with Hexaly Optimizer	Anton Hens - Development of a Variable Neighborhood Search algorithm for scheduling and routing fully flexible 'on-demand-only' feeder bus systems	Renaud De Landtsheer - Systematic Derivation of a Global Constraint for Routing Optimization
	Philippe Blondeel - Modeling Sand Ripple in Mine Countermeasure Simulations with Stochastic Optimal Control	Charles Thomas - A Constraint Programming Approach for Aircraft Disassembly Scheduling	Margot Hubert - Optimization method to integrate driver consistency and route balancing in a heterogeneous multi-period dial-a-ride problem	Boshuai Zhao - The Dial-a-Ride Problem with Limited Pickups per Trip
	Alexandre Flachs - Determining stability intervals for intra-critreria parameters in PROMETHEE II	Morteza Davari - Lock scheduling with non-identical parallel chambers	Fien Sneyers - Inventory Management in a Synchromodal Transport Network - An Inventory Replenishment Heuristic with Order Expediting	Lissa Melis - Delivering efficiency: The parcel locker puzzle
	Boris Coquelet - Evaluating the PROMETHEE II ranking quality	Leonie Gallois - Project scheduling with an external resource		

14:20 - 14:45	**Coffee break** *(Corridors of the C-building)*

14:45 - 15:45	**Plenary session - Keynote Margaretha Gansterer** **"Last-mile delivery with shared resources: modeling and recent developments"** *(Room S.C.003)*

15:45 - 16:15	**ORBEL award and closing session** *(Room S.C.003)*