Wednesday, June 4 (GMT Time +2)

| 08:00- 09:30 | RECEPTION/REGISTRATION | | |
|-----------------|---|---|---|
| 09:30- 10:30 | Opening and Ceremony of 40th birthday of DC (Difference of Convex functions) programming and DCA (DC Algorithm) | | |
| | Room: Grand Amphithéâtre | | |
| 10:30- 11:30 | PLENARY TALK 1: From Optimization to AI: 40 Years of DCA's Evolution and Impact Speaker: Hoai An Le Thi Chairman: D. Yaroslav Sergeyev | | |
| | Room: Grand Amphithéâtre | | |
| 11:30- 13:00 | LUNCH | | |
| | WA1 (Special Session): Recent advances in DC programming and DCA: Theory, Algorithms and Applications 1 Chairman: Hoai An Le Thi Room: Grand Amphithéâtre | WA2 (Special Session): Explainability, Data Privacy, and Fairness in Trustworthy AI 1 Chairman: Süreyya Akyüz Room: Petit Amphithéâtre | WA3: Machine Learning & Big Data 1 Chairman: Jan Van Vuuren Room: BN3-001 |
| 13:00- 13:20 | A unified approach to finding directional stationary points of difference-of-convex optimization problems points of difference-of-convex optimization problems | A Novel Robust Optimization Model: The Synergy of Stochastic Functional Gradients and Kernel Methods in Machine Learning Mohammed Thamer Alkhazraji, Duygu Üçüncü, | Framework for Detecting and Suggesting Corrections for Missing and Inconsistent Data in Vietnam's National Residents Database Tuan-Anh Nguyen, Quang-Dung Pham, Quoc- |
| | Hoai An Le Thi, Van Ngai Huynh, and Tao Pham Dinh | and Süreyya Akyüz | Trung Bui |
| 13:20- 13:40 | Tight Convergence Rates in Gradient Mapping for the Difference-of-Convex Algorithm | Optimizing Ensemble of CNNs: A Semi-Infinite Solution for Efficient Model Selection | A knowledge graph approach towards detecting large language model hallucination |
| | Teodor Rotaru, Panagiotis Patrinos, and François Glineur | Melisa Caliskan Demir and Sureyya Akyuz | Thomas Winter and Jan Van Vuuren |
| 13:40- 14:00 | * Online presentation* High-Order Moment Portfolio Optimization via an Accelerated Difference-of-Convex Programming Approach with Line Search and Sums-of-Squares | Ensemble Pruning with Convex Programming for XAI Ozen Yilmaz, Sureyya Ozogur-Akyuz, and Duygu Üçüncü | * Online presentation* Toward Enhancing Legal Reasoning with Integration of an Arabic Legal Ontology And SWRL-based Rules Zeinab Bahsoun, Ali Kalakech, Malak Khreis |

| | Yi-Shuai Niu, Yajuan Wang, Hoai An Le Thi, and Tao Pham Dinh | | |
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| 14:00- 14:15 | COFFEE BREAK | | |
| 14:15- 15:15 | PLENARY TALK 2: Invertible Neural Netv Speaker: Laurent El Ghaoui Chairman: Tao Pham Dinh | vorks and Implicit Models | |
| | Room: Grand Amphithéâtre | | |
| | WA4 (Special Session): Recent advances in DC programming and DCA: Theory, Algorithms and Applications 2 Chairman: Hoai An Le Thi Room: Grand Amphithéâtre | WA5 (Special Session): Explainability, Data Privacy, and Fairness in Trustworthy AI 2 Chairman: Süreyya Akyüz Room: Petit Amphithéâtre | WA6: Optimization and Decision Making 1 Chairman: Imed Kacem Room: BN3-001 |
| 15:20- 15:40 | A DC approach for the chance-constrained portfolio optimization problem Hoai An Le Thi, Thi My Le Le, Julien Wallart, Hoai Minh Le | DiCE-Extended: A Robust Approach to Counterfactual Explanations in Machine Learning Volkan Bakir, Polat Goktas, and Süreyya Akyüz | Joint Production, maintenance and quality inspection planning of a hybrid manufacturing/remanufacturing system under production rate dependent deterioration Patrick Megoze Pongha, Jean-Pierre Kenne, and Lucas Hof |
| 15:40- 16:00 | A DCA Approach for a Maximum Flow Network Interdiction Problem Hoai An Le Thi, Thi Minh Tam Nguyen | FreezeResNet: A Novel Deep Learning Model for Rapid and Accurate Classification of Intracranial Hemorrhage Subtypes Samane Sharifi Monfared, Hassan Imani, and Lavdie Rada | Energy system pathway optimization considering market-based and geopolitical technology criticality Suzanne Le Bihan, Tobias Naegler, Steffen Johannes Schlosse, Karl-Kiên Cao, Michaela Schicho, and Frederik Dunke |
| 16:00- 16:20 | DC Programming and DCA for Secrecy Rate Maximization via null space AF relay beamforming in a Wireless Network with Multiple Eavesdroppers Hoai An Le Thi, Thi Thuy Tran, Nhu Tuan Nguyen | Task-Specific Architecture Analysis for Brain Tumor Classification Ece Nur Sonar and Duygu Cakir | Transformer-based decision support for multi- objective recommendations Cornelia Kloppers and Jan Van Vuuren |

| | WA7: Optimization and Decision Making 2 Chairman: Lina Mallozzi Room: Grand Amphithéâtre | WA8: Machine Learning & Big Data 2 Chairman: Jan Van Vuuren Room: Petit Amphithéâtre | WA9 (Special Session): Innovations for Health: From Acquisition to AI-Driven Analysis (IHAIA) Chairman: Marie Luong Room: BN3-001 |
|-----------------|--|--|---|
| 16:20- 16:40 | Presolve techniques for quasi-convex chance constraints with finite-support low-dimensional uncertainty Guillaume Van Dessel and François Glineur | An OCR-LLM framework towards Tabular Data Extraction Christiaan J Pieterse, Pvz Venter | Smart Pixels Sensor for Diffuse Optical Tomography E. Tinet, D. Ettori, F. Ramaz, JM. Tualle |
| 16:40- 17:00 | Empirical and computer-aided robustness analysis of long-step and accelerated methods in smooth convex optimization Pierre Vernimmen and François Glineur | Comparison of Competing Artificial Neural Networks Models for Stock Market Forecasting Konstantinos Liagkouras and Kostas Metaxiotis | Ultrasound speckle denoising using ResUNet- based diffusion model Nhat-Duy Pham, Marie Luong, Mounir Kaaniche, Dinh-Hoan Trinh, and Aladine Chetouani |
| 17:00- 17:20 | Hierarchical Games in Facility Location Problems Lina Mallozzi | An efficient BERT-based algorithm for extracting opinion targets from financial news Louis We Boshoff and Jan Van Vuuren | * Online presentation* Toward Better Optimization of Low-Dose CT Enhancement: A Critical Analysis of Loss Functions and Image Quality Assessment Metrics Yousra Taifour, Beghdadi Azeddine, Luong Marie, Ming Zuheng |
| 17:20- 17:40 | Explicit convergence rate of the proximal point algorithm under R-continuity Khiet Le Ba and Michel Thera | The Physics-Informed Neural Networks approach to parameter identification problems in unsteady Navier-Stokes equations Nhat-Duy Pham, Canh Nam Nguyen, Thi Thanh Mai Ta | * Online presentation* Self-Distilled EfficientNet: A Novel Training Framework for Thyroid Image Classification Quoc Hieu Nguyen, Van De Nguyen, Tien Dung Vu, Trong Hieu Nguyen, Dinh Tung Pham, Dinh Hoan Trinh, Aladine Chetouani, Marie Luong |
| 17:40- 18:00 | Efficient Nonlinear Model Predictive Control for Quadrotor UAV Trajectory Tracking Xuan The Nguyen, Dinh Thai Kim, Xuan Hai Le, and Quang Thuan Nguyen | Space-Time Block Code Patterns for Enhancing Physical Layer Security for next-generation networks Cong-Hoang Diem and Dinh-Tan Pham | * Online presentation* Image Features and Image Dataset Augmentation for Skin Lesions Machine Learning Classification Eluwumi Petrus-Nihi, Rumana Akther, and Nikolay Sirakov |

Thursday, June 5 (GMT Time +2)

| | TM1: Optimization and Decision Making 3 Chairman: Michel Thera Room: Grand Amphithéâtre | TM2: New trends on decision models and applications 1 Chairman: Imed Kacem Room: Petit Amphithéâtre | TM3: Machine Learning & Big Data 3 Chairman: Duc Quynh Tran Room: BN3-001 |
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| 08:30- 08:50 | A Non-Monotone Line-Search Method for Minimizing Functions with Spurious Local Minima Zohreh Aminifard and Geovani Nunes Grapiglia | Maximum Lateness Minimization on Two Parallel Machines with a Non-availability Interval Youcef Abdelsadek, Abdelhak Elidrissi, Imed Kacem, Qing Lu, and Noureddine Tlati | Aligning metrics in time series anomaly detection with desirable behaviour in practice Daniel Barrish and Jan Van Vuuren |
| 08:50- 09:10 | A New Algorithm for Solving the Primal Standard Linear Programming Problem and Numerical Experimental Results Van Hoan Tran and Anh Tuan Nguyen | Mobile Decision Support for Electronically Assisted Astronomy Olivier Parisot and Mickael Stefas | A novel feature engineering method for rainfall prediction Huu Hai Nguyen, Duc Quynh Tran, and Hoai Minh Le |
| 09:10- 09:30 | A derivative-free simplex algorithm for the local minimization of a concave program, with some extensions Mohand Bentobache | Machine Learning for Characterizing the Tardiness Minimization Problem on a Single Machine Youcef Abdelsadek, Bochra Djahel, Allaoua Hemmak, Imed Kacem, and Giorgio Lucarelli | * Online presentation* Deployment-affordable Automatic Student Attendance System Utilizing Face Recognition Khanh-Huyen Tran, Minh-Duc D.X, Manh-Hung Ha, Dinh-Tan Pham, Cong-Doan Truong |
| 09:30- 09:50 | Enhancing finite-difference-based derivative-free optimization with machine learning Timothé Taminiau, Geovani Grapiglia, and Estelle Massart | * Online presentation* Quantum Computing Models for Financial Analysis Pablo Herrero Gómez, Francisco Pujol-López, Ana Martínez García, and Higinio Mora Mora | * Online presentation* Hybrid artificial intelligence models incorporating neutrosophy for predicting student outcomes Thi Kim Son Nguyen, Van Dat Bui, Hong Hoa Nguyen, and Thi Thu Trang Hoang |
| 09:50- 10:05 10:05- 11:05 | Speaker: Frederic Dufaux | ologies towards a more realistic and immersive | e user experience |
| | Chairman: Laurent El Ghaoui Room: Grand Amphithéâtre | | |

| | TM4 (Special Session): Combinatorial Optimization and Its Applications 1 Chairman: Viet Hung Nguyen | TM5 (Special Session): New trends on decision models and applications 2 Chairman: Imed Kacem | TM6: Machine Learning & Big Data 4 Chairman: Youcef Abdelsadek Room: BN3-001 |
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| | Room: Grand Amphithéâtre | Room: Petit Amphithéâtre | |
| 11:10- 11:30 | A multi-objective optimization approach for generalized linear multiplicative programming Minh Hieu Nguyen and Thanh Loan Nguyen | Optimal Approach for Calculating Allocation Keys in a Collective Self-Consumption Operation F. Blagui, M. Haddad, JM. Nicod, C. Varnier, N. Zerhouni | Solving systems of fractional differential equations by using physics informed deep learning methods and application to a fractional order Bergman's minimal type model of insulin injection |
| | | | Baptiste Guilbery, Aziz Belmiloudi, Mounir Haddou |
| 11:30- 11:50 | Managing Time Expanded Networks through Project and Lift Approaches: The Lift Issue Jose-Luis Figueroa, Alain Quilliot, Helene Toussaint | Stochastic optimization for integrated scheduling of electric bus trip and charging considering V2G and battery degradation Ming Liu, Yueyu Ding, Feng Chu, Feifeng Zheng, Chengbin Chu | Comparing Performance of Machine Learning Techniques in Predicting Financial Distress of Listed Firms in Vietnam Cong Doan Truong, Thi Kim Oanh Nguyen, Tuan Tung Le |
| 11:50- 12:10 | Consolidation of Biomimicry and Swarm-based Metaheuristic Algorithms with Supervised Learning Neural Network for Function Approximation Zhen-Yao Chen, Ming-Te Cheng, and Yun-You Tsai | * Online presentation* A branch-and-price algorithm for unrelated parallel machine scheduling with a limited budget to minimize the maximum tardiness Chen Jianfu, Sahli Abderrahim, Li Kai, Xiao Wei, and Chu chengbin | * Online presentation* Integrating Local Learning Algorithms and Vision Transformers for Accurate Rice Yield Prediction Thuy-Vi Ha-Thi and Thanh-Nghi Do |
| 12:10- 13:40 | LUNCH | - | |
| | TA1 (Special Session): Combinatorial Optimization and Its Applications 2 Chairman: Viet Hung Nguyen Room: Grand Amphithéâtre | TA2: Optimization and Decision Making 4 Chairman: Vinh Thanh Ho Room: Petit Amphithéâtre | TA3 (Special Session): Uncertainty quantification and its applications in supply chain or logistics 1 Chairman: Eduardo Souza De Cursi Room: BN3-001 |
| 13:40- 14:00 | Last-mile logistics in retail: maximising the number of customers served and minimising the total travel time Yakov Zinder, Yefei Zhang, and Hanyu Gu | Short Food Supply Chain: A Mathematical Model and Metaheuristic Algorithms Vinh Thanh Ho and Adnan Yassine | * Online presentation* Modeling Uncertain Travel Times in Distribution Logistics: A Case Study in Casablanca city |

| | | | Khadija Ait Mamoun, Lamia Hammadi, Said Jidane, Babacar M Ndiaye, Abdessamad Elballouti, Lahcen Belyamani, Antonio Novaes, and Eduardo Souza De Cursi |
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| 14:00- 14:20 | On the star forest polytope for 4-cactus graphs Thanh Loan Nguyen, Viet Hung Nguyen, Minh Hieu Nguyen, and Thi Viet Thanh Vu | * Online presentation* DMOWA-COBRA-Based Approach for Collaborative Multi-Criteria Group Decision- Making in Supply Chains Ryma Zegai, Imen Khettabi, Lyes Benyoucef, and Moncef Abbas | * Online presentation* A probabilistic model for facility location in humanitarian logistic: Handling demand and infrastructure uncertainty Hajar Raillani, Lamia Hammadi, Said Jidane, Babacar M. Ndiaye, Vlad Barbu, Abdessamad Elballouti, Lahcen Belyamani, and Eduardo Souza De Cursi |
| 14:20- 14:40 | * Online presentation* A study on dominating set: NP-hardness and Polynomial Results Anh Son Ta, Ngoc C.Le, Pham Le Vu, and Anh Tu Nguyen | * Online presentation* Towards Sustainable and Resilient Supply Chains: The Role of Big Data Analytics and Digital Twin Technologies Souad Douhane, Lahcen Tamym, Lyes Benyoucef, and Elmoukhtar Zemmouri | * Online presentation* Uncertainty Quantification model for forecasting of Daily Emergency Department Arrivals Hind Haboubi, Lamia Hammadi, Said Jidane, Babacar M Ndiaye, Emmanuel Pagnacco, Abdessamad Elballouti, Lahcen Belyamani, and Eduardo Souza De Cursi |
| 14:40- 14:55 | COFFEE BREAK | | |
| 14:55- 15:55 | PLENARY TALK 4: Solving Multifacility Location Problem By DC Algorithms Speaker: Boris S. Mordukhovich Chairman: Hoai An Le Thi Room: Grand Amphithéâtre | | |
| 16:00- 18:00 | VISIT POMPIDOU MUSEUM | | |
| 19:30- 22:00 | CONFERENCE BANQUET | | |

Friday, June 6 (GMT Time +2)

| | FM1: Optimization and Decision Making 5 Chairman: Frederic Dambreville Room: Grand Amphithéâtre | FM2 (Special Session): Modeling & Optimization Applications in Transportation, Charging, and Logistics: Bridging Academia and Industry Chairman: Doanh Nguyen-Ngoc | FM3: Machine Learning & Big Data 5 Chairman: Hoai Minh Le Room: BN3-001 |
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| | | Room: Petit Amphithéâtre | |
| 08:30- 08:50 | Law-Smooth update for the cross-entropy method: conceptual issues, perspectives and application to infrared tracking camera Frederic Dambreville and Christian Musso | Evaluate the transit services in Khanh Hoa province before and after expansion of bus network Linh Do-Bui-Khanh, Truong Nguyen Huu, An Minh Ngoc, and Doanh Nguyen-Ngoc | Deep Auto-Encoder learning of fish species clustering in the upstream sectors of the Moselle River Samudranil Basak, Gerard Masson, Hoai Minh Le, and Baba Issa Camara |
| 08:50- 09:10 | Optimal IT and Electrical Sizing Approach for Sustainable Energy-Autonomous Datacenters Benaissa Manal, Da Costa Georges, and Nicod Jean-Marc | Shift or Improve Strategies in Transport: Findings from Simulating the Impacts of Low-Carbon Urban Transport Measures on Emission Reduction Doanh Nguyen-Ngoc and An Minh Ngoc | Fusing Multi-agent Reinforcement Learning and Fiscal Theory for Crisis Management Quang Truong Dang, Bao Bui Quoc, Anh Son Ta |
| 09:10- 09:30 | Non-Existence of Additive Approximations for the Black-and-White Coloring Problem Shira Zucker | A Novel Deep Learning-based Algorithm for Mobile Robot Coverage Path Planning in Dynamic Environments Considering Energy Constraints Doanh Nguyen-Ngoc, Thi Cam Giang Tran, Duc Manh Do, and Thi Thu Huyen Tran | * Online presentation* Deep Learning for Hand Gesture Recognition using Channel-wise Topology Refinement Dinh-Tan Pham, Cong-Hoang Diem |
| 09:30- 09:50 | * Online presentation* Delhi Air Quality Efficiency: A Comprehensive Evaluation Using the DEA Approach Ashish Yadav, Bharti Seth, Ritu Arora, and Shalini Arora | Digital Twin Platform for Green and Sustainable Management of Public Bus Systems: A Case Study in Khanh Hoa Province, Vietnam Linh Do-Bui-Khanh, Doanh Nguyen-Ngoc, Nghi Huynh-Quang | * Online presentation* Speech balloon and Character association for comics Trung Thong Nguyen, Hong Quang Ngo, Van Tuan Doan, Thi Bich Thuy Nguyen Thi, Van Tri Vu, and Minh Thuy Ta |

| 09:50- 10:10 | * Online presentation* An Efficient Energy Optimization Model for UAVs Coverage Path Planning Manh Cuong Nguyen and Van Thien Nguyen | Comprehensive Overview of Digital Twin Platform to Empower Communities Towards an Eco-friendly and Healthy Future: Applications in Transportation and Air Quality Doanh Nguyen-Ngoc, Linh Do-Bui-Khanh, Nghi Huynh-Quang | * Online presentation* Reinforcement learning for solving Generalized Nash Equilibrium Problem Benjamin Benteke Longaou, Monica-Gabriela Cojocaru, and Nickolas Hoover |
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| 10:10- 10:25 | COFFEE BREAK | | |
| 10:25- 11:25 | PLENARY TALK 5: Numerical infinities an Speaker: D. Yaroslav Sergeyev Chairman: Boris S. Mordukhovich Room: Grand Amphithéâtre | nd infinitesimals in optimization | |
| | FM4: Optimization and Decision Making 6 Chairman: Quang Thuan Nguyen Room: Grand Amphithéâtre | FM5 (Special Session): Uncertainty quantification and its applications in supply chain or logistics 2 Chairman: Eduardo Souza De Cursi Room: Petit Amphithéâtre | FM6: Computer Vision and Image Processing Chairman: Marie Luong Room: BN3-001 |
| 11:25- 11:45 | Online Mixed-Case Palletizing via Reinforcement Learning Sebastian Herrera, German Pantoja, Alvarez- Martinez David | * Online presentation* Hilbertian Bayesian Optimisation Carol Santos Almonte, Oscar Sanchez Jimenez, Emmanuel Pagnacco, and Eduardo Souza De Cursi | * Online presentation* Real-Time Student Behavior Detection in Classroom Using YOLOv8 Model Quang Thuan Nguyen, Dinh Thai Kim, Xuan Hai Le, Anh Phuong Pham |
| 11:45- 12:05 | A Hybrid Alternating Nonnegative Least-Squares Method Toward Well-Conditioned Nonnegative Matrix Factorization Saman Babaie-Kafaki, Fatemeh Dargahi, and Maryam Khoshsimaye-Bargard | * Online presentation* Energy-Efficient Job Shop Scheduling under TOU Tariffs Using Hybrid MILP and GA Assiya Zahid, Patrice Leclaire, Lamia Hammadi, Roberta Costa Affonso, and Abdessamad Elballouti | * Online presentation* Efficient Multi-Scale Attention Based On Mobilenetv4 Followed OmniSPPF And ODGC2f For Small-Scale Egg Identification Duc Quang-Anh Nguyen, Manh-Hung Ha, Duc-Minh Pham, Minh-Anh Nguyen, Ba Tung Duong Le, Lan-Anh D.t, and Phuong-Ngan Pham |
| 12:05- 12:25 | * Online presentation* A dissection method for the optimal rectangle packing problem | * Online presentation* A Mixed-Integer Linear Programming Model for Efficient Supply Chain Network Design | * Online presentation* Application of Artificial Intelligence in Face Physiognomy A Modern Approach to an Ancient Practice |

| | Lipovetsky Alexander and Evgeny Lipovetsky | Ghita Bouchtaoui, Lamia Hammadi, Ridha Derrouiche, Roberta Costa Affonso, and Abdessamad Elballouti | Duc Thong Tran and Thi Bich Thuy Nguyen |
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| 12:25- 14:00 | LUNCH | | |
| 14:00- | PLENARY TALK 6: Advances in Non-Convex Optimization: Shuffling Methods and Momentum Techniques for Machine Learning | | |
| 15:00 | Speaker: Lam Nguyen | | |
| | Chairman: Hoai An Le Thi | | |
| | Room: Grand Amphithéâtre | | |