Université de Lorraine, France
LCOMS, Metz
October 30-31, 2017

Program

MOPGP2017

2017 International Conference on Multiple Objective Programming and Goal Programming

2017 International Conference on Multiple Objective Programming and Goal Programming

MOPGP2017

MOPGP2017 PRESENTATION

Welcome to MOPGP2017!

Prof. Imed KACEM
MOPGP2017 Program
Committee Chair

The 2017 International Conference on Multiple Objective Programming and Goal Programming (MOPGP2017) is organized to disseminate recent theoretical and methodological developments, significant technical applications, case studies and survey results in the related area.

The conference consisted of both plenary sessions and technical sessions, focusing on theory and applications in multiple-objective optimization and decision-making. It has attracted about 90 submissions from about 31 countries and regions (Algeria, Bahrain, Belgium, Brazil, Canada, Chile, China, Colombia, Czech Republic, France, Germany, India, Iran, Italy, Kazakhstan, Lebanon, Lithuania, Netherlands, Poland, Portugal, Qatar, Saudi Arabia, Spain, Sudan, Switzerland, Thailand, Tunisia, Turkey, United Kingdom, United Arab Emirates and USA). After a careful evaluation, about 60 submissions to the conference were included in the final program from.

The conference aims to provide a very good opportunity for researchers and students to exchange their ideas, gain insight from academic leaders, and enjoy the charm of the French history in Moselle.

Many people have assisted in the success of this conference. We would like to thank all the members of the Program and Organization Committees for their hard work and to express our gratitude to our sponsors (Université de Lorraine, LCOMS, UFR MIM, MCDM, GDR-RO CNRS, ROADEF, Annals of Operations Research) for their assistance in the organization of this event. We would like also to express our thanks to all authors for contributing their research papers to the conference.

Have a successful event and a pleasant visit in Metz!

Prof. Imed KACEM

MOPGP2017 PRESENTATION

Dr. Pierre LAROCHE
MOPG2017 Organization
Committee Chair

Welcome to the Université de Lorraine, on the beautiful campus situated on the Technopole, near to the heart of Metz. The city can be reached from Paris by train in less than one hour and a half.

The 2017 International Conference on Multiple Objective Programming and Goal Programming (MOPGP2017) is organized by the LCOMS Laboratory of Université de Lorraine, with the help of our partners.

The conference organization is supervised by a team of ten researchers of the LCOMS Laboratory to provide you a nice and interesting event. We hope you will enjoy the social programs, the visit of the Pompidou Museum (on 29 October) followed by the visit of the city on 31 October. We are also very happy to offer you the Gala diner in a very nice place of Metz-Centre.

There are nice cafes and restaurants in the places Saint Jacques, Saint Louis, de Chambre, where you can taste some local specialities like quiche lorraine, pâté lorrain and mirabelle products.

We hope that this event will also be a good occasion for you to create new collaborations, to develop new projects and scientific partnerships, around a coffee or during the lunches.

Have a nice conference and pleasant stay in Metz!

Dr. Pierre LAROCHE

SCIENTIFIC COMMITTEE & CHAIRS

Conference Chair: Imed Kacem (University of Lorraine, France)

Organizing Committee

- *Chair:* Pierre Laroche (University of Lorraine, France)
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- Fouad Ben Abdelaziz (NEOMA Business School, France)
- Hatem Masri (University of Bahrain, Kingdom of Bahrain)

MOPGP2017 PROGRAM

SOCIAL PROGRAM: 15:00, October 29th, 2017
Centre POMPIDOU
57000, Metz

TECHNICAL PROGRAM:

<table>
<tr><th colspan="5">October 30, 2017</th><th colspan="5">October 31, 2017</th></tr>
<tr><td colspan="5">08:15 - 09:00 REGISTRATION</td><td colspan="5" rowspan="2">08:30 - 10:30 Technical Sessions</td></tr>
<tr><td colspan="5">09:00 - 10:30 Technical Sessions</td></tr>
<tr><td>A1</td><td>A2</td><td>A3</td><td>A4</td><td>A5</td><td>C1</td><td>C2</td><td>C3</td><td>C4</td><td>C5</td></tr>
<tr><td colspan="5">10:30 - 11:00 Coffee Break</td><td colspan="5">10:30 - 11:00 Coffee Break</td></tr>
<tr><td colspan="5">11:00 - 11:15 OPENING CEREMONY</td><td colspan="5">11:00 -12:00 Plenary Session 2</td></tr>
<tr><td colspan="5">11:15 - 12:15 Plenary Session 1</td><td colspan="5">12:00 -12:15 CLOSING CEREMONY</td></tr>
<tr><td colspan="5">12:15 - 13:45 Lunch</td><td colspan="5">12:15 - 14:00 Lunch</td></tr>
<tr><td colspan="5">13:45 - 16:15 Technical Sessions</td><td colspan="5">Free time</td></tr>
<tr><td rowspan="2">B1</td><td rowspan="2">B2</td><td rowspan="2">B3</td><td rowspan="2">B4</td><td rowspan="2">B5</td><td colspan="5">14:30 - 17:00</td></tr>
<tr><td colspan="5">Visit of METZ</td></tr>
<tr><td colspan="5">16:15 - 16:45 Coffee Break</td><td colspan="5" rowspan="3"></td></tr>
<tr><td colspan="5">FREE TIME</td></tr>
<tr><td colspan="5">19:15 GALA BANQUET</td></tr>
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Sessions and rooms: UFR MIM, 3 rue Augustin Fresnel, 57000, METZ, according to the following assignment:

Session	Opening Ceremony Plenary Sessions	A1, B1, C1	A2, B2, C2	A3, B3, C3	A4, B4, C4	A5, B5, C5
Room	Grand Amphi	Room BN3-008	Room BN3-010	Room BN3-011	Room BN3-012	Room BN3-013

PRESENTATIONS The duration of each presentation is of 20 minutes plus 10 minutes for questions. Accepted file formats for your presentation are PDF and PPT.

Room BN3-009 is avalaible for deeper discussions and work.

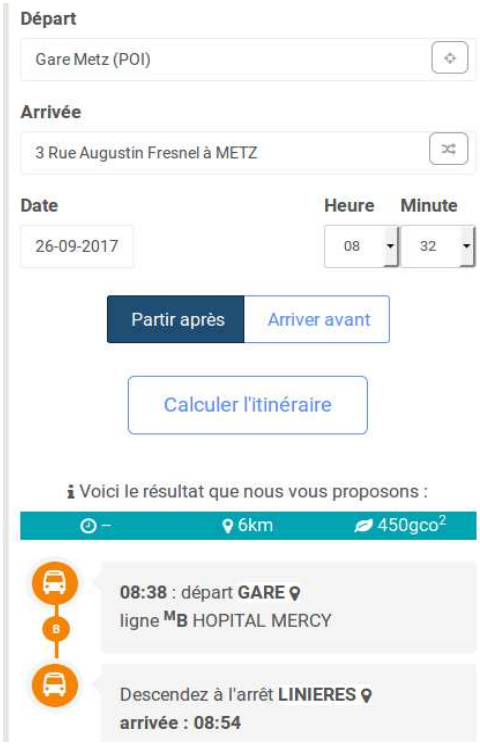
GALA BANQUET	19:30, Monday, October 30th, 2017 Bistrot de G, 9 rue du Faisan, Metz
COFFEE BREAK	UFR MIM, LCOMS, AN2, 3 rue Augustin Fresnel, Metz
SOCIAL PROGRAM	15:00, Sunday, October 29th, 2017 Visit of the Centre Pompidou of Metz 14:30, October 31th, 2017 Visit of the city of Metz (More information will be announced during the conference.)
LUNCH	UFR MIM, LCOMS, AN2, 3 rue Augustin Fresnel, Metz
PLENARY SESSIONS	Grand Amphi – UFR MIM 3 rue Augustin Fresnel, Metz
WIFI ACCESS	Information will be provided during the conference.

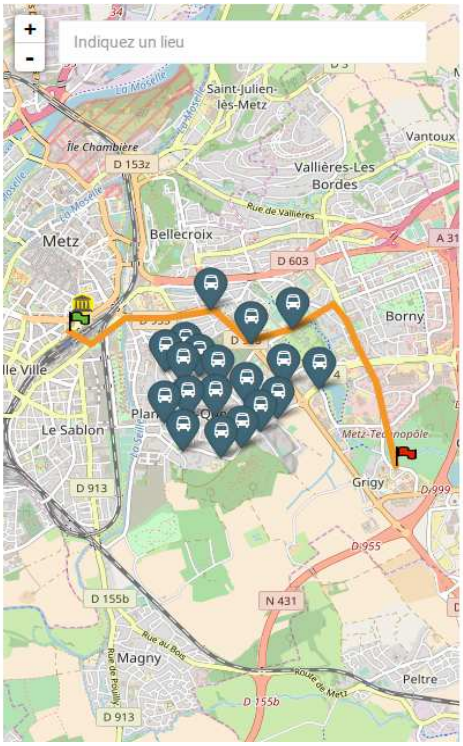
ACCESS MAP

CONFERENCE SITE

The conference will take place in the **new** building of UFR MIM, 3 rue Augustin Fresnel, Metz-Technopole.

To reach the conference location from the center of the city or the station, take the local bus "Mettis", B line direction "Hôpital de Mercy", until LINIERES bus-stop, just in front of the ufr (15-20 minutes travel from station/city center).





MOPGP2017 CONFERENCE CHAIRS

Prof. Imed KACEM is Full Professor since 2009 at the University of Lorraine, France, in Computer Science. He is the Founder and the Head of LCOMS Laboratory of the University of Lorraine since 2013 (LCOMS is the Laboratory of Design, Optimization and Modelling of Systems) after being the Head of the Computer Science Department. His scientific activity is in the Operational Research. More precisely, his contributions are related to the design of exact and approximate algorithms with a guaranteed performance for the NP-hard combinatorial problems. Such problems are mainly related to the scheduling theory. The applications are interdisciplinary and various (production, packing in electronic design, healthcare, transportation, information visualization…). His contributions have been published in referred journals (*Theoretical Computer Science, Discrete Applied Mathematics, Discrete Optimization, Journal of Combinatorial Optimization, Journal of Scheduling, Information Sciences, RAIRO-OR, JIMO, IJPE, EJOR, 4OR, CAIE, CAOR, IEEE/SMC Transactions,*...). These research activities have involved the supervision of 14 PhD theses as well as several selective projects (some of them have been funded by the ANR, the European Commission, the CNRS, …). He serves as area editor or guest editor for several journals (Annals of Operations Research-Springer, Computers & Industrial Engineering-Elsevier, RAIRO-Operations Research, European Journal of Industrial Engineering, Journal of Systems Science and Systems Engineering-Springer, AutoSoft Journal-Taylor & Francis…) and as Keynote Speaker for several conferences (IEEE/CIE40, Japon (2010); FUBUTEC2011, United Kingdom (2011); IEEE/CoDIT2013, Tunisia (2013); IEEE/ICSCS2013, France (2013); DASA2016, Tunisia (2016); CIE46, China (2016), AMATH'16, Switzerland (2016); IEEE/CoDIT2017, Spain (2017), META2018, Morocco (2018)). He chaired the program committee or the organizing committee of several international conferences (IEEE/ICSSSM06 (Troyes, 2006); IEEE/CIE'39 (Troyes, 2009); IEEE/CoDIT'14 (Metz, 2014); CIE'45 (Metz, 2015); IEEE/CoDIT'16 (Malta, 2016); ROADEF2017 (Metz, 2017); MOPGP2017 (Metz, 2017)). He obtained the « Great Award of Research 2010 » from the Universities of Lorraine, the 3rd Robert Faure Award 2009 from the French Society of Operational Research and Aid Decision (ROADEF), the 2015 Steffan Schwarz Award (Best Paper Award of the European Conference ECEC'2015 in Portugal), and he has regularly the PEDR or the PES Premium (with the highest level A) since 2006.

Dr. Pierre LAROCHE obtained his Bachelor of Science Degree from Nancy 2 University in Computer Science Applied to Business Management (1994) and his Master of Science Degree in Computer Science from Henri Poincaré University (1995). He obtained his PhD in 2000, as a member of Loria laboratory, under the supervision of Pr. Jean-Paul Haton and INRIA researcher François Charpillet.

He is currently Assistant Professor in Computer Science, at the University of Lorraine, France.

His first research experiences were in artificial intelligence, and, more precisely, in planning under uncertainty applied to mobile robots. He is now a member of the « Decision and Optimisation » team of the LCOMS Laboratory, working in the field of operations research. He is particularly interested by health-care systems and the related operational research applications. He has assumed various responsabilities since he joined the University of Lorraine, and he has been Head of Computer Science Department of the « Institut Universitaire de Technologie » et the Organizing Committee Chair of IEEE/CoDIT'14. He is also an expert for the national Agency for Research and Higher Education Assessment (AERES).

Technical Content

PLENARY SESSIONS

KEYNOTE 1

Multi-objective Optimisation – Past, Present and Future

By Prof. Matthias Ehrgott

Department of Management Science, Lancaster University, UK

Abstract: Multi-objective optimisation is concerned with the simultaneous optimisation of several conflicting objective functions. Many scholars attribute the origin of this field to Vilfredo Pareto. Nevertheless, the term ``Pareto optimality'' was coined only 50 years later. The real history of multi-objective optimisation as a mathematical discipline begins in the 1950s when economists published first mathematical results. Since then the field has grown many prosperous branches, such as multi-objective linear programming, multi-objective combinatorial optimisation, evolutionary multi-objective optimisation and so forth. With increasing computing capabilities, it has also become possible to apply our methods to real world problems. Today we are in a situation, where the tools of multi-objective optimisation have a very strong theoretical foundation and can be applied to problems of sizes relevant to real decision makers. This, I think, opens many possibilities for the future of this field. In this talk, I will sketch the history of multi-objective optimization from its early sources to the bright outlook for the future.

Biography: Matthias Ehrgott studied Mathematics, Economics and Computer Science at the University of Kaiserslautern in Germany where he obtained Masters (1992), PhD (1997) and Habilitation (2001) degrees. In 2000, he moved to the Department of Engineering Science at the University of Auckland, New Zealand, as a lecturer and became full Professor and Head of Department in 2011. Since 2013, he works at Lancaster University Management School. He served as Head of the Management Science Department from 2014-2017. Matthias' research interest is in multi-objective optimisation, which he applies in a variety of areas such as medicine, transportation, and manufacturing. He has published about 80 journal papers, book chapters and proceedings contributions on theory, methodology, and applications of multi-objective optimisation. In addition, he has authored and edited about 30 books, proceedings volumes and special issues of journals on the topic. The book "Multicriteria Optimization" (Springer, 2005) is a standard monograph in the field. In total, his work has been cited more than 11,000 times (Google Scholar). He serves on the editorial board of several journals including Computers & OR and Journal of Global Optimization. Since 2002, he has been on the Executive Committee of the International Society on Multiple Criteria Decision Making, where he is president elect for the period 2019-2023. In 2011, he received the Edgeworth-Pareto award of that Society. He organized the 19th International MCDM Conference in 2008 and was on the programme committee of many other international conferences, including several MOPGP and MCDM meetings.

KEYNOTE 2

From Decision to Optimization

By Prof. Fouad Ben Abdelaziz

NEOMA Business School, Mont Saint Aignan

Abstract: The seminar will address the modeling problem in Multi-criteria Decision Situations. We will discuss variety of situations where the researcher has to transform the real problem into a solvable model. We will present the different transformation strategies and the implications on problem solving. Research examples will be provided and illustrated. We will deal with uncertainty when addressing many objectives. We will address dynamic situations as the optimal stopping problem. Interactive decision making situations will be also briefly presented.

Biography: Fouad Ben Abdelaziz is currently Professor and head of the MSc in Supply Chain Management at NEOMA Business School, France. He was a Senior Fulbright scholar at the Rutgers Center for Operations Research, Rutgers University, NJ. He received his PhD in Operations and Decision Systems from Laval University, Canada. He has been working at the American University of Sharjah, University of Dubai, The American University of Beirut, and the University of Tunis. He is a leading researcher in multi-objective stochastic optimization with applications to SCM and Multi-attribute portfolio selection problems. Aside his publications in outstanding journals like EJOR, JORS, IJAR, FSS and CAIE, he served as Guest Editor for European Journal of Operations Research and Fuzzy Sets and Systems. He was also the chair and the organizer of many international conferences as the Multi-objective and Goal Programming Conference MOPGP and the International Conference on Multidimensional Finance Investment and Insurance ICMFII.

TECHNICAL SESSIONS

SESSION A1 – A5: Monday, October 30th, 09h00-10h30

SESSION A1: Applications with Multicriteria Aspects 1
Chair: Shahin Gelareh — Room BN3-008

30 Bi-objective Load Balancing Multiple Allocation Hub Location: A compromise programming approach
Shahin Gelareh, Rahimeh Neamatian Monemi, Dylan Jones, Nelson Maculan and Anass Nagih

87 Evaluating University Performance using Reference Point Based Synthetic Indicators. The case of Andaluca (Spain)
Samira El Gibari, Trinidad Gómez Núñez and Francisco Ruiz de La Rúa

77 Bi-Objective Optimization Applied in Denoising Speech Signal
Djamal Chaabane, Said Ouznadji and Messaoud Thameri

SESSION A2: Applications with Multicriteria Aspects 2
Chairs: Tadeusz Trzaskalik — Room BN3-010

68 Control of Electric Vehicles Energy Flows through a Multi-Objective and Multi-Criteria Optimization Algorithm
Ghimar Merhy, Ahmed Nait-Sidi-Moh and Nazih Moubayed

73 Strategic decision making of a biorefinery project under sustainability dimensions: A multi-objective optimization approach
Andrea Teresa Espinoza Pérez, Mauricio Camargo, Paulo César Narváez Rincón and Miguel Domingo Alfaro Marchant

90 A multi-Objective Optimisation Metaheuristic for Forecasting the Electricity Consumption of the UAE: A Grey Wolf Approach
Mohamed Osman, Andreas Karathanasopoulos and Fouad Ben Abdelaziz

SESSION A3: Goal Programming 1
Chair: Fernando Ferreira — Room BN3-011

28 Incorporation of Poverty Principles into Goal Programming
Dylan Jones, Djamila Ouelhadj and Antonios Glampedakis

40 Using Goal Programming with Satisfaction Function to Model the Nurse Timetabling: a Case Study of an Intensive Care Unit in a Tunisian University Hospital
Zeineb Fourati, Hichem Kammoun and Soulef Smaoui

48 An Extended Goal Programming Methodology to Facilitate Sustainable Growth in Container Ports
Concepción Cortés Rodríguez, Dylan Jones and Juan José García Del Hoyo

SESSION A4: Goal Programming 2
Chair: Dylan Jones — Room BN3-012

46 A combined DEA/GP method for efficiency assessment of offshore wind and tidal stream energies
Negar Akbari and Dylan Jones

3 Long run sustainability of European Union countries: a Fuzzy Goal Programming Model
Aymeric Vie, Danilo Liuzzi, Cinzia Colapinto and Davide La Torre

33 Long-run Sustainability and Economic Growth in Kazakhstan: A Study based on Multicriteria Decision Making and Goal Programming
Sara Rat, Tolkyn Abdildina, Cinzia Colapinto, Danilo Liuzzi and Davide La Torre

SESSION A5: Special session on Models and optimization methods for vehicle routing problems
Chair: Rahma Lahyani & Malek Masmoudi — Room BN3-013

43 Epsilon constraint method for cell formation problem
Soukaina Triki, Hichem Kamoun and Malek Masmoudi

44 Epsilon constraint method for Home care routing and scheduling problem
Soukaina Triki, Salma Hadj Taeib, Malek Masmoudi, Sohaib Afifi and Abdelaziz Dammak

45 The Multi-Depot Fleet Size and Mix Vehicle Routing Problem: Formulations and Branch-and-Cut Algorithms
Rahma Lahyani, Leandro Coelho and Jacques Renaud

SESSION B1 – B5: Monday, October 30th, 13h45-16h15

SESSION B1: Multiobjective Optimization and Decision Models
Chairs: Xavier Gandibleux — Room BN3-008

82 Applications of the reference set method to prioritization of technological strategies of a knowledge repository
Andrzej M.J. Skulimowski

38 An Intuition-Based Evaluation Framework for Social Credit Applications
Maria Xavier, Fernando Ferreira and José Esperança

31 An ordinal multi-criteria decision-making procedure with imprecise linguistic ratings
José Luis García-Lapresta and Raquel González Del Pozo

61 Datastructures for Filtering and Storing Non-Dominated Points
Dorian Dumez, Xavier Gandibleux and Irena Rusu

75 Optimizing over the efficient set of the binary bicriteria knapsack problem
Lachemi Nadia and Chaabane Djamal

SESSION B2: Scheduling and Planning
Chairs: Mauricio Camargo & Pierre Laroche — Room BN3-010

15 A robust proactive surgeries scheduling
Dalel Amami and Abdelaziz Dammak

16 Multiobjective IMRT Treatment Planning: approximating the non-dominated set using a fuzzy inference based heuristic
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Gais Alhadi, Imed Kacem, Pierre Laroche and Momammed-Izzeldin Osman

64 Multi-objective Flexible Job Shop Scheduling Problem: Simulation Approach
Yiyi Xu, M'hammed Sahnoun, Fouad Ben Abdelaziz, David Baudry and Anne Louis

84 The Variable neighborhood search for the multi-objective job shop scheduling problem
Imen Bouzaya and Abdelaziz Dammak

SESSION B3: Supply Chain
Chair: Mehdi Toloo — Room BN3-011

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Mehdi Toloo and Emmanuel Kwasi Mensah

62 Bi-objective optimization for a two-depot automated storage/retrieval system in container terminals
Ming Liu, Xiaoyi Man, Feng Chu, Feifeng Zheng and Bachir Djafri

67 Visual decision support for the multi-objective supplier selection problem
Florian Kellner, Bernhard Lienland and Sebastian Utz

78 A Genetic Algorithm to optimize the supply chain cost of a distributed production system: An approach based on production-transportation scheduling
Siwar Bouzid, Achraf Jabeur Telmoudi and Said Gattoufi

85 Unstable interactions in customers' decision making: A marketing application
Volker G. Kuppelwieser, Fouad Ben Abdelaziz and Olfa Meddeb

SESSION B4: VRP & Transportation
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69 Multiobjective stochastic VRPTW: cash transportation vehicle routing
Fouad Ben Abdelaziz and Houda Alaya

71 Adaptive Many-Objective Pareto Local Search for the traveling salesperson problem with profits
Andrzej Jaszkiewicz

72 Branch-and-price algorithms for the Bi-Objective Vehicle Routing Problem with Time Windows
Estèle Glize, Nicolas Jozefowiez and Sandra Ulrich Ngueveu

88 Solving the Multi-Objective Team Orienteering Problem with Uncertain Travel Time
Hiba Bederina and Mhand Hifi

89 Tackling the Robust Vehicle Routing Problem with Discrete Set of Scenarios
Hiba Bederina and Mhand Hifi

SESSION B5: Waste collection and management
Chair: Pablo A. Miranda — Room BN3-013

20 Optimization Models for the Waste Management Problem, A review
Haifa Jemmali, Mejdi Argoubi and Hatem Masri

37 The Intellectual Structure of the Waste Management Field: Objective literature review, multi-objective modularity model, co-citation analysis, and science mapping
Mejdi Argoubi, Haifa Jemmali and Hatem Masri

47 Towards Insular Vehicle Routing Problems with Fairness Concerns using Goal Programming: A Household Waste Collection Case
Pablo A. Miranda, Jana Ries and Dylan Jones

54 A hybrid metaheuristic to approximate the Pareto Front of a waste collection problem
Laura Delgado Antequera, Fátima Pérez, Francisco Ruiz and Rafael Caballero

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SESSION C1: Network
Chair: Fouad Ben Abdelaziz — Room BN3-008

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Ibrahima Diarrassouba, Mohamed Labidi and Ali Ridha Mahjoub

76 A Branch-and-Cut algorithm for the Asymmetric VPN Tree Problem
Ibrahima Diarrassouba, Pedro Henrique P. V. Liguori and A. Ridha Mahjoub

79 A New Distributed Algorithm for Finding Dominating Sets in IoT Networks under Multiple Criteria
Madani Bezoui, Ahcene Bounceur, Reinhardt Euler, Mustapha Moulaï and Massinissa Lounis

80 New approach to study user reviews on social networks
Sirine Bouzid, Achraf Jabeur Telmoudi and Said Gattoufi

SESSION C2: Multi-objective Linear Programming
Chair: Hatem Masri — Room BN3-010

14 An exact algorithm to find non-dominated facets of Tri-Objective MILPs
Seyyed Amir Babak Rasmi, Ali Fattahi and Metin Turkay

27 Solving Biobjective Stochastic Integer Linear Optimization
Salima Amrouche and Mustapha Moulai

42 A game theory approach to solve linear bi-objective programming problems
Madani Bezoui, Ahcene Bounceur, Reinhardt Euler, Mustapha Moulaï and Youcef Djeddi

24 Reducing Wall-Clock Time for the Computation of All Efficient Extreme Points in Multiple Objective Linear Programming
Ralph E. Steuer and Craig A. Piercy

SESSION C3: Portfolio management and optimization
Chair: Sebastian Utz — Room BN3-011

1 Financial Portfolio Management using Stochastic Dynamic Multicriteria Decision Making
Fouad Ben Abdelaziz, Cinzia Colapinto, Danilo Liuzzi and Davide La Torre

41 A multi-criteria decision support tool for project portfolio management of the Sonatrach oil upstream
Madani Bezoui, Ahcene Bounceur, Reinhardt Euler, Mustapha Moulaï, Nissia Kaouane and Fatima Zohra Ferhati

51 An application of multiobjective stochastic dynamic programming in project portfolio selection
Maciej Nowak and Tadeusz Trzaskalik

70 Sustainable-impact investing and portfolio diversification - a global analysis in a multi-objective setting
Sebastian Utz and Ralph Steuer

SESSION C4: Healthcare
Chair: Wlodzimierz Ogryczak — Room BN3-012

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J.C. Gerdessen, G.D.H. Claassen, P. van 'T Veer and J.G.A.J. van der Vorst

49 Multi-objective surgery case scheduling integrating multiple surgeons' roster constraints: A case study
Khalfalli Marwa and Kamoun Hichem

19 Equitable goal programming model for periodic vehicle routing and scheduling problems
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29 A Multiple Objective Ambulance Location Model: Case of Beirut area in Lebanon
Bilal El Itani, Fouad Ben Abdelaziz and Hatem Masri

SESSION C5: Multi-objective Linear Programming 2
Chairs: Matthias Ehrgott — Room BN3-013

36 A Comparison of Exact Methods for the Determination of the Nadir Point of a Multi-objective Linear Programme
Zhengliang Liu and Matthias Ehrgott

7 ENUCUT-V, a hybrid approach to integer linear vector optimization problems
Walter Habenicht

74 The Proactive Countermeasure Selection Problem: Bilevel Programming and Polyhedral Investigation
Mohamed Yassine Naghmouchi, Ridha Mahjoub and Nancy Perrot

CONTACTS

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http://lcoms.univ-lorraine.fr/

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MOPGP2017 is organized by the LCOMS Laboratory of the Université de Lorraine (see www.univ-lorraine.fr). Université de Lorraine is a multidisciplinary university which enjoys a central position -Region Lorraine FRANCE- in Europe, opening to Germany and the Benelux, and enrolling more than 55000 students and about 4000 researchers - teachers. With its 60 recognized laboratories this university constitutes one of the 10 largest French campuses of excellence.
Université de Lorraine is clearly committed to opening up its European dimension and has developed international-oriented education and research activities with funding from European programs, international cooperation networks, and bilateral agreements.

The LCOMS (www.lcoms.univ-lorraine.fr) is a multidisciplinary laboratory. It is organized in five teams: « *Decision and OPtimization* » (DOP), « *Human Machine Interface* » (IHM), « *Performance Evaluation and Human Assistance Systems* » (EPSAP), « *Design of Communicating Systems and Intelligent Sensors* » (ASEC) and « *Reliability, Anticipation &nd Resilience* » (RARe). These teams develop a multidisciplinary and interdisciplinary research and work on original problems covering the fields of complex systems optimization, assistance to individuals and for communication, embedded systems design, reliability and healthcare systems.
The resources include about 80 individuals, 5 research teams, nearly 50 researchers, about thirty Ph.D students and engineers, some administrative staff and, they profit from several services for supporting the research activities. The laboratory has an excellent scientific production level by publishing about 100 articles in international journals during the last 4 years, and it has a strong participation to high-education programs related to the scientific research and to the professional learning. Several collaborations exist between the LCOMS teams and other French and foreign universities. These collaborations are concretized by high-level publications, national and international projects (ANR, FP7, FEDER, CNES…) and the organization of prestigious international conferences (ROADEF2017, CIE39, CoDIT14, CIE45…).

MOPGP2017

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