International Society on Multiple Criteria Decision Making

E-News ● 2015 ● Issue 1 (February)

MCDM

Contents

Front: Colosseum, Rome, Italy © Martin Geiger, Hamburg, Germany

Letter from the President

Dear Members of the International Society on Multiple Criteria Decision Making,

First of all, I would like to remind you that it is time to prepare your abstract for the main event of our society, the International Conference on Multiple Criteria Decision Making (MCDM2015), which will be organized in **Hamburg, Germany, on August 3-7, 2015**. Please, find more information about the conference in this newsletter as well as at the conference website http://www2.hsu-hh.de/logistik/MCDM-2015. The abstract submission system is open and the abstract submission deadline is **March 13, 2015**.

Different awards of the society will be presented in Hamburg and you can now make nominations for each of the three awards of the society by **March 14, 2015**. Those of you who have received a doctoral degree with an outstanding thesis since the beginning of the year 2013 are eligible to send an application by **March 1, 2015** to get the MCDM Doctoral Dissertation Award. The Wiley Practice Prize sponsored by Wiley will be awarded to the best paper describing a real-life application of multiple criteria decision making presented at the MCDM2015 conference (deadline for papers is **March 10, 2015**). Further information of all these calls is available in this newsletter.

According to the bylaws of the society, an elections committee has been formed to nominate candidates to fill the positions of the executive committee that will become open after the MCDM2015 conference. Among them is the new President-Elect. The candidates nominated by the elections committee will be announced at the website of the society and members of the society can make further nominations during the MCDM2015 conference (following the instructions given there). An election will take place after the conference and after that the new executive committee for the term 2015-2017 will be complete.

I hope that you all will very actively spread information about this conference to all potential participants who are interested in the methods, theory, new developments and/or applications of MCDM and I look forward to seeing many of you in Hamburg!

The venue of the MCDM2017 conference will be decided and announced in Hamburg. We welcome proposals including the information detailed in the call for proposals in this newsletter. The deadline for sending proposals to me is **May 30, 2015**. Because we have had several conferences in a row in Europe, we welcome very warmly proposals to host the conference outside Europe.

The next **MCDA/MCDM Summer School** will organized in **Recife, Brazil in July 2016**. Some preliminary information is already included in this newsletter. Please, follow the website http://cdsid.org.br/mc-summer-school2016/.

We have received information of many future conferences as well as reports of recent events including a very recent Dagstuhl Seminar on Understanding Complexity in Multiobjective Optimization organized by Salvatore Greco, Kathrin Klamroth, Joshua Knowles and Gunter Rudolph. I hope that you will find the information and reports useful. For example, if you plan to attend the **27th European Conference on Operational Research** (EURO 2015, http://www.euro2015.org/), in Glasgow, UK on July 12-15 or the **22nd International Symposium on Mathematical Programming** (ISMP, http://www.ismp2015.org/) in Pittsburgh, PA, USA, on July 12-17, 2015,

you are invited to organize a session in either of the conferences. The call for sessions can be found in this newsletter. The session may be devoted to any aspect of multiobjective optimization, including theory, methods and challenges of applications.

As before, recent publications (of 2014) are listed in this newsletter. Thanks to those of you who have provided information!

I warmly thank the active editorial team for preparing this newsletter! I also remind you, dear readers, that your **feedback and contributions to the upcoming newsletters are most welcome!**

This is my last column as the President of our society because my four-year term will end at the end of the MCDM2015 conference in Hamburg. The current President-Elect Murat Köksalan will write a column in the autumn's newsletter as the new President. I look forward to seeing many of you in Hamburg but I already take this opportunity of thanking you for collaboration and your efforts devoted to our field and society. I have served the society for a long time, first as the Secretary and then as the President-Elect and the President and it has been a great pleasure to meet you over the years and to work with many of you. In particular, I want to sincerely thank the Executive Committees of the society and, in particular, the secretary of the society, Francisco Ruiz, who will end his term as the secretary in Hamburg as well. It has been a great pleasure to work with you!

Remember that the officers of our Society can easily be contacted at the following email addresses:

president (at) mcdmsociety.org,

president-elect (at)mcdmsociety.org,

secretary (at) mcdmsociety.org,

mcdm-award (at) mcdmsociety.org,

phdaward (at) mcdmsociety.org, and

newsletter (at) mcdmsociety.org.

Kaisa Miettinen

President of the International Society on MCDM

President (at) mcdmsociety.org

Professor and Vice-rector, University of Jyväskylä, Finland

P.S. It is important that you **keep your contact information up to date** at http://mcdmsociety.org/members/. Enter your email address and password to modify your data. If you have forgotten your password, please, click the "Forgot your password" link, type in your email address and you will receive instructions by email. If you face any problems in updating your data, e.g. your email address has changed, please, contact the Secretary of the Society at secretary (at) mcdmsociety.org.

1   Society News

1.1   23rd International Conference on Multiple Criteria Decision Making (MCDM 2015)

Dear friends and colleagues,

and another warm *Moin* from Hamburg…!

www.mediaserver.hamburg.de, C. Spahrbier

This year we are getting serious with the 23rd International Conference on Multiple Criteria Decision Making. I cordially invite you to this event!

The submission of **abstracts** is **open**. We are looking forward to your contribution. Abstracts with a rather convenient length of at most 6000 characters can be entered under
https://easychair.org/conferences/?conf=mcdm2015
Note that the **deadline** for **submitting** talks/ **abstracts** is **March 13th, 2015,** so there is still sufficient time to contribute (or, you just to it right away ☺).
A set of special journal issues is going to enlarge your possibilities for submitting your work (with the submission deadlines after the conference).

In the past months, we have updated the conference website,
http://logistik.hsu-hh.de/MCDM-2015
Please bookmark this page, and come back once in a while, checking for news, updates, and recent developments. Are we missing some important information? Then let us know, we'll make the update.

You can see that we are planning for a strong scientific program, featuring numerous talks to topics within MCDM, almost 20 invited sessions (or mini-streams, depending on the number of

submissions), 3 keynote talks, the award-talks of the MCDM Society award winners, the presentations of the MCDM Doctoral Dissertation Award finalists, the Wiley practice Price session, …

www.mediaserver.hamburg.de, C. Spahrbier

Following the traditions of the International Society on MCDM, a rich social program is going to complement the scientific part, including the conference banquet, cruising the river Elbe (with a scenic view on the city), an outing/excursion, and an informal get-together prior to the first day of the conference. Also, we have placed an order for warm and sunny weather°☺.

Looking forward to see you in summer, sincerely yours,

Martin Josef Geiger

International Society on

Multiple Criteria Decision Making

Call for Proposals to Organize the MCDM2017 Conference

The main scientific event of the International Society on Multiple Criteria Decision Making (http://www.mcdmsociety.org) is the International Conference on Multiple Criteria Decision Making which is organized every two years. We welcome proposals to host and organize the 24th International Conference on Multiple Criteria Decision Making in 2017.

While preparing the proposal, please, pay careful attention to the traditions of the Society related to its conferences and make sure that you are prepared to follow them. The traditions can be found at http://www.mcdmsociety.org/conf.html#Traditions.

According to the bylaws of the Society, the International Conference Chairperson shall be responsible for all the conference arrangements and for information dissemination as directed by the Executive Committee. He/she shall be an *ex officio* member of the Executive Committee.

The proposal should contain at least the following information:

1. Name of Conference Chairperson with address, email and telephone and names of possible other main organizers (e.g. Chair of Program Committee if known)
2. Contact email address
3. Venue and host institution of the Conference
4. Support from host institution and from other organizations (if available or whether can be applied, e.g. financial or other type, please, specify details)
5. Possible assistance available (estimate of the number of staff members and students to be involved in local organization)
6. Registration fee (including lunches, coffees, outing, banquet, abstract book etc.) – regular and student fees (as reliable estimate as possible). Indicate also maximum registration fee which will not be exceeded
7. Program outline
8. Tentative main theme of the Conference

9. Information about how the Conference venue can be reached from e.g. main airports
10. Proximity of accommodation to the Conference venue
11. Information about accommodation possibilities (including inexpensive alternatives for students) and prices
12. Capacity of the main auditorium and lecture rooms for parallel sessions (including how many lecture rooms are available)
13. Information whether the organizers have identified some domains where special sessions could be organized e.g. to build bridges between fields related to MCDM, to demonstrate special application fields of MCDM etc.
14. Information whether some of the traditions of the Society cannot be followed (with explanation why so)
15. Possible attractions of the location/venue
16. Any past experience in organizing international conferences and collecting financial support for them (in the proposed venue or elsewhere, give names, dates and further information)

The executive committee of the Society will make the decision in its meeting in Hamburg during the 23rd International Conference on Multiple Criteria Decision Making (MCDM2015) in August 2015. The Conference Chairperson or his/her representative is expected to present the proposal in the meeting. It is possible that the decision of the host of the subsequent International Conference will be made in the same meeting, so, please mention in your proposal whether you are interested in organizing the MCDM2019 conference.

Send your proposal by email to the President of the Society, Prof. Kaisa Miettinen, at president@mcdmsociety.org by **May 30, 2015**. She can also provide further information.

1.3   Call for Applications: MCDM Doctorial Dissertation Award 2015

At the 23rd International Conference on Multiple Criteria Decision Making, the International Society on Multiple Criteria Decision Making will bestow the MCDM Doctoral Dissertation Award upon a scholar who has recently obtained a doctoral degree and demonstrated excellence in her or his doctoral dissertation research in Multiple Criteria Decision Making (MCDM) or a related field. The MCDM Doctoral Dissertation Competition identifies and recognizes outstanding doctoral dissertation research, completed since the beginning of 2013, in the development of theory, methodology, and/or the application of theory or methodology to MCDM.

The MCDM Doctoral Dissertation Award Committee will evaluate the applications, identify finalists and provide recommendations to the MCDM Executive Committee for the final decision. The award will be announced at the 23rd International Conference on Multiple Criteria Decision

Making, Hamburg, Germany, August 3-7th, 2015. The finalists are expected to give a talk at the conference. The finalists will be exempt from paying the conference fee.

Deadline for applications: Please email the zip file of the application packet to the awards committee at phdaward@mcdmsociety.org by **March 1st, 2015**. The finalists will be informed by June 1st, 2015.

Eligibility: Those whose dissertation is in MCDM or a related field and who graduated with a doctoral degree after January 1st, 2013. Only dissertations which have been written in English are eligible.

The application packet should include the following documents (all of which must be in English, except possibly the diploma):

- Cover letter
- Applicant's 2-3 page resume
- Scanned copy of the original diploma of the Doctoral Degree
- Electronic copy of the Doctoral Dissertation
- Extended Abstract of the Doctoral Dissertation in English, limit of four single-spaced pages
- Copies of publications/patents based on the Doctoral Dissertation, if any. In this case, we need a statement from the supervisor saying that the publication(s) derive from the dissertation. Also include publications accepted for a journal, accompanied with the Editor's acceptance letter.
- An endorsement letter from the supervisor(s), highlighting the significance of the dissertation
- (Optional) Additional supporting letters that the applicant wishes to attach

International MCDM Doctoral Dissertation Committee

Jyrki Wallenius (Chair)

Email: Jyrki.Wallenius@aalto.fi

1.4   Call for Nominations: MCDM Society Awards 2015

The International Society on Multiple Criteria Decision Making has been presenting awards honouring contributions of members of the MCDM community, at each of its meetings since 1992. The next set of awards will be presented at the 23rd International Conference on MCDM in Hamburg, Germany, 3-7 August 2015. The Society has three awards: **1. MCDM Gold Medal, 2.**

Edgeworth-Pareto Award, and 3. Georg Cantor Award, and nominations are now invited for each of the three awards. The awards committee will decide on which awards will be made in 2015, and to whom they are to be made.

The following guidelines will apply in deciding on each of the awards:

- The Gold Medal is awarded on the basis of a long term contribution to the field of MCDM seen broadly;
- The Edgeworth-Pareto Award is made on the basis of significant and novel applications of MCDM models and approaches (without which the field of MCDM would "not exist in its current form");
- The Georg Cantor Award is made on the basis of novel developments in the theory and methodological approaches of MCDM, representing a spirit of "independent enquiry".

Submit nominations (preferably by email) to: Professor Theodor Stewart, Department of Statistical Sciences, University of Cape Town, Rondebosch 7701, South Africa, email: theodor.stewart@uct.ac.za (or alternate email: tjstew@iafrica.com).

To assure full consideration of nominations:

1. Make the nominations by March 14, 2015.
2. State clearly the award for which the nomination is being made.
3. Indicate the name of the nominee, why (s)he is worthy of the award, his/her contributions to the MCDM field, and anything else that is relevant to the award.
4. Provide the CV of the nominee or a link to it.

Awardees are expected to attend the conference and give a talk. More information concerning the awards and past awardees may be found on the web site of the society.

The Members of the Award Committee for 2015 are:

- Theodor Stewart (Chair), University of Cape Town
- Valerie Belton, University of Strathclyde
- Kalyanmoy Deb, Michigan State University
- James Dyer, University of Texas
- Martin Giger (2015 Conference Convenor), Helmut Schmidt University
- Kaisa Miettinen (President, MCDM Society), University of Jyväskylä
- Roman Slowinski, Poznan University
- Ralph Steuer, University of Georgia
- Jyrki Wallenius, Aalto University

1.5   Call for Applications: Wiley Practice Prize 2015

John Wiley & Sons Limited, as publishers of the *Journal of Multi-Criteria Decision Analysis*, are once more sponsoring a prize for the best paper describing a real-life application of multiple criteria decision making presented at the 23rd International Conference on Multiple Criteria Decision Making to be held in Hamburg, Germany, 3-7 August, 2015. The prize is US $1000, while the winning paper and approved finalist papers will be published in the journal.

Conference delegates wishing to have their papers considered for the prize should submit full papers by 10 March 2015, <u>directly</u> <u>to</u> Theo Stewart (Editor in Chief of the journal) at <u>theodor.stewart@uct.ac.za</u>, with a copy to the conference organizer at <u>m.j.geiger@hsu-hh.de</u>. This submission implies that the paper has not been submitted for publication to any journal. Note also that the abstract of the paper must still separately be uploaded to the conference submission system.

The adjudication process will then be as follows:

- A committee will perform a preliminary screening of submissions to select four finalists. The finalists will be informed by 10 May, 2015.

- The finalists will at this point be required to upload their papers formally on to the JMCDA on-line submission system (Instructions will be given at that time). The papers will then be subject to a full review according to the standard procedures of the journal.

- Finalist papers which have been submitted to the journal will be assembled into a special practice prize session at the conference, where their status as finalists will be advertised.

- The final decision of the practice prize jury will be announced at the conference banquet, on 6 August. The jury will take into consideration both the presentation at the conference and the referees' reports from the journal.

The prize winning paper is ensured publication in the journal, although minor revisions may still be requested. Decisions on the others will be subject to reviewers' comments, and may require revisions as a condition for publication. The intention is to group all of these papers into a single issue of the journal if at all possible.

1.6   Announcement of MCDA/M Summer School 2016

The **12ᵗʰ International MCDA/M Summer School** is going to take place in **Recife/Brazil in July 2016**. Details are available at http://cdsid.org.br/mc-summer-school2016/

The aim of this school is to give to doctoral students/young researchers a state-of-the-art presentation of multiple criteria methods, applications and software. And also to stimulate a network of young researchers in MCDA/M. The scientific program of the summer school consists of invited lectures and working groups for discussion of case studies.

The host institution will be the Universidade Federal de Pernambuco, Management Engineering Department and the venue will be a hotel in Boa Viagem Beach, in Recife, capital of Pernambuco, that is strategically located in northeastern Brazil.

The state of Pernambuco has a wide variety of natural, cultural and historical attractions. It has as a tropical climate which means it is bathed on sunshine throughout the year. Pernambuco boasts some natural wonders such as the beach at Porto de Galinhas and Fernando de Noronha Archipelago, which have fascinated visitors from all over the world.

Recife has a prime location, not only in regional terms within Brazil but also in relation to Europe (a 7-hour flight from Lisbon) and to North America (a 7h 30min flight from Miami), and of course it is easily accessible from other Brazilian cities and elsewhere in South America. The International airport of Recife/Guararapes has direct flights to Lisbon (via TAP), Miami (via American Airlines), Panama (via Copa Airlines) and Frankfurt (Via Condor Airlines). Other national hubs with daily connections to Recife include airports such as Guarulhos in São Paulo and Tom Jobim in Rio de Janeiro.

The MCDA/M Summer School is a two-week event, taking place on **18ᵗʰ – 29ᵗʰ July, 2016**. We are looking forward to seeing you in MCDA/M Summer School in Recife/Brazil, July 2016.

2 Upcoming Events and Call for Papers

2.1 *Special Issue on "Understanding Complexity in Multiobjective Optimization" of the Journal of Multi-Criteria Decision Analysis*

Guest Editors: Salvatore Greco, Kathrin Klamroth, Joshua Knowles, Günter Rudolph

This special issue is devoted to further strengthen the links between the Evolutionary Multiobjective Optimization (EMO) and Multiple Criteria Decision Making (MCDM) communities, and to advance our understanding of different aspects concerning complexity in multiobjective optimization.

The need for a better understanding of complexity is pressing and timely, as recent work has sometimes shown opposing views regarding how problems scale and grow in difficulty, and their inherent challenges. On the one hand, we know that multiobjective optimization problems are complex problems by their very nature; optimization problems that are easy to solve in the single objective case are often intractable and highly complex already in the biobjective case. Moreover, recent work has pointed to further fundamental limitations in multiobjective optimization as we scale up to many objectives.

On the other hand, a multiobjective perspective can in a sense also help reduce complexity. For example, it often leads to a better understanding of a problem and hence supports the decision making process. Moreover, adding objectives to a problem does not always make it harder, because decomposing it can reduce the presence of local optima. And multiobjective approaches can also be used to support constraint handling, to model robustness criteria, or to approach bilevel optimization problems, simplifying these aspects. Further afield, too, in the machine learning community, we are seeing that the multiobjective optimization perspective is being used to get at the root of ill-posed problems in dimensionality reduction, pattern recognition and classification.

From the MCDM point of view, we observe that there is an intrinsic complexity in the process of understanding the optimization problem and building preferences on the solutions proposed by the multiobjective optimization. At the beginning of the decision process the Decision Maker (DM) has a rather vague idea of the decision problem at hand and, consequently, also the preferences are incomplete, approximate, uncertain or fuzzy.

Thus, better understanding complexity in multiobjective optimization is of central importance for the two communities, MCDM and EMO, and several related disciplines. It would enable us to wield existing methodologies with greater knowledge, control and effect, and should, more importantly, provide the foundations and impetus for the development of new, principled methods, in this area. Taking into account the above remarks, complexity in multiobjective optimization, as the main theme of the special issue, will be focused around three topics:

Focus 1: Complexity in preference
This topic is mainly concerned with elicitation, representation and exploitation of the preference of one or more users, for example: discovering and building preferences that are dynamic and unstable, group preference, complex structure of criteria, non-standard preferences, learning in multiobjective optimization.

Focus 2: Complexity in optimization
This topic is mainly concerned with the generation of alternative candidate solutions, given some set of objective functions and feasible space. The following topics are examples for the wide range of issues in this context: high-dimensional problems, complex optimization problems, simulation-based optimization and expensive functions, uncertainty and robustness, interrelating decision and objective space information.

Focus 3: Complexity in applications
An all-embracing goal is to achieve a better understanding of complexity in practical problems. Many fields in the Social Sciences, Economics, Engineering Sciences are relevant: E-government, Finance, Environmental Assessment, E-commerce, Public Policy Evaluation, Risk Management and Security issues are among the possible application areas.

These three topics will provide a strong basis for progress in both the theory and practice of handling complexity in multiobjective optimization in all its guises.

Submissions are now invited for this special issue, which will be subject to the standard review processes of the journal. Contributions should be submitted online at http://mc.manuscriptcentral.com/mcda, making sure that the box asking whether the submission is for special issue is checked, and that "understanding complexity in multiobjective optimization" is entered into the appropriate field. The final date for submissions is 31 July 2015.

2.2   *Information Technology and Quantitative Management (ITQM) 2015*

Date: July 21-24, 2015
Venue: Ibmec, Rio de Janeiro, Brazil

Exploring Data Science in IT and Quantitative Management

Conference Organizers:
International Academy of Information Technology and Quantitative Management (IAITQM)
Ibmec, Rio de Janeiro, Brazil (Ibmec)
Brazilian Society of Operations Research, Brazil

Conference Chairs: Luiz F. Autran M. Gomes (Ibmec), Yong Shi (IAITQM)

Keynote speakers:
> **Raj Reddy**, the 1994 Turing Award recipient, a member of the US National Academy of Engineering, Carnegie Mellon University, USA.
> **James Tien**, a member of the US National Academy of Engineering, Dean of College of Engineering, University of Miami, USA.
> **Po-Lung Yu**, the Distinguished Professor (Emeritus) of University of Kansas (KU), Kansas, and Distinguished Professor for Life of National Chiao-Tung University (NCTU), Taiwan.

The International Conference on Information Technology and Quantitative Management (ITQM), established by IAITQM, is a global forum for exchanging research findings and case studies that bridge the latest information technology and quantitative management techniques. It explores the use of information technology to improve quantitative management techniques and how the development of management tools can reshape the development of information technology.
The First International Conference on Information Technology and Quantitative Management (ITQM2013) took place in Suzhou, China. The Second International Conference on Information Technology and Quantitative Management (ITQM 2014) was held in Moscow, Russia.

Topics:

- IT-enabled quantitative management and decision making in the government sector and in public and private companies
- Applications of IT-enabled quantitative management and decision making in Logistics, Finance, Marketing, Strategy, Human Resources, IT, Project Management, Process Improvement, Sustainability, Innovation, and other Management disciplines
- Developments in IT-enabled quantitative management and decision making in different industries, such as Oil and Gas, Banking, Transportation, Utilities, Health care, Telecom, Education, etc.
- Habitual domain and behavioral approaches to Big Data analytics
- Data Science issues in information technology and quantitative management
- Applications of Big Data technologies and methods (e.g., Data Mining, Data Warehousing, Data Analysis) to support optimal decision making
- Using mobile technologies and cloud computing to enhance optimal decision making
- Applications of Social Networks Analysis in IT-enabled quantitative management and decision making
- IT-enabled quantitative management and maturity models
- Soft computing methods in quantitative management and decision making processes
- Developments in Multicriteria Analysis related to IT-enabled quantitative management
- Semantic learning and intelligent awareness
- Quantitative management tools

Important Dates
Paper Submission Deadline: February 28, 2015
Early Registration starting date: March 31, 2015
Early Registration due date: April 30, 2015

Publications
All accepted papers after strict peer-reviewing process will be included in the main conference proceedings by ProcediaComputerScience（Elsevier), which will be submitted for indexing, such as CPCI-S,EI. All accepted special sessions/workshops after strict peer-reviewing process will be included in the International Journal of Information Technology and Decision Making (2013 SCI Impact Factor: 1.980), and Annals of Data Science (Springer).
Email: itqm2015@gmail.com
Website: http://www.itqm-meeting.org/2015/
- See more at: http://ifors.org/web/itqm-2015/#sthash.hPy7XTQJ.dpuf

2.3   27th European Conference on Operational Research

27th European Conference on Operational Research

12-15 July 2015
University of Strathclyde

EURO 2015
12-15 JULY 2015
GLASGOW

EURO
The Association of European
Operational Research Societies

Second CALL FOR PAPERS

The next European Conference on Operational Research, EURO2015: Operational Research In Practice, will take place at the University of Strathclyde's new Technology and Innovation Centre in Glasgow. It is *the* place to present your work and find out about other cutting edge ideas emerging from the Operational Research community. Glasgow is very lively city, and we have a great social programme to look forward to.

Researchers, academics, practitioners, and students interested in any branch of Operational Research, mathematical modelling or economic analysis are invited to submit abstracts or organise sessions.

The deadline for abstract submissions is March 16, 2015, but if you are interested in organising a session then you should contact the Programme Committee. More information is on the website, including

Event Deadlines

Abstracts

Abstract Submission
OPEN

**Abstract Submission
Deadline**
Monday 16 March 2015

**Submit an
abstract now >**

Registration

Registration and
Accommodation

details of the main topical areas, the Programme and Organising Committee members, and details of how to submit your abstract.

Submit an abstract now >

We look forward to welcoming you to our very exciting conference in Glasgow.

Conference Secretariat
c/o MCI UK Ltd
Suite 4.1, Turnberry House
175 West George Street
Glasgow
G2 2LB

Tel: +44 (0) 141 202 2888
Twitter: @EUROonline_News
Email: euro2015@mci-group.com
Web: www.euro2015.org

Booking OPEN

Early Bird Deadline
Monday 20 April 2015
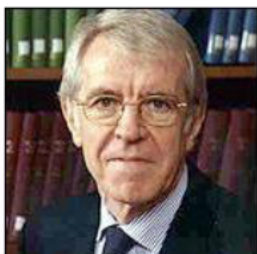
Registration Deadline
Friday 8 May 2015

Register online now >

Plenary Speakers Announced

R.Tyrrell Rockafellar
University of Washington

"Risk and reliability in stochastic optimization"

Sir Alan Wilson
University College London

"Public policy & governance, sustainable cities"

M Grazia Speranza
University of Brescia

"Trends in transportation and logistics"

Further news about the programme and key speakers will be announced soon.

2.4   Call for Sessions on Multiobjective Optimization at EURO 2015 and ISMP 2015

Dear Colleague,

Next July, two big OR conferences will be organized: on July 12-15 the 27th European Conference on Operational Research, EURO 2015 (http://www.euro2015.org/), in Glasgow, UK and on July 12-17 the 22nd International Symposium on Mathematical Programming, ISMP 2015 (http://www.ismp2015.org/), in Pittsburgh, USA.

We are organizing a stream/cluster devoted to Multiobjective Optimization at both these conferences. We invite you to organize a session in either of these conferences. If you are interested, please, let us know and we can include your session in the electronic Abstract Submission System and you can invite speakers to your session conveniently (a session can naturally have more than one organizer in which case you'll just have to decide who will chair the session). At this point, you can give a tentative title of your session and you can modify it later. Please, remember to mention which conference your session belongs to.

If you know a colleague who might be interested in organizing a session in either of the conferences, please, feel free to forward this invitation.

Each session at EURO2015 should consist of 4 talks and at ISMP 2015 of 3 talks. The EURO deadline for abstract is March 16, 2015 and the ISMP deadline is March 2, 2015.

It is naturally also possible to submit individual contributed abstracts. We shall create sessions of them if we find enough abstracts in the same area.

We hope that you are interested in organizing a session (or several sessions) or contributing you abstract and that together we can increase the visibility of multiobjective optimization in these conferences!

If you have any questions, please, do not hesitate to contact us!

With best regards,

Kaisa Miettinen and *Matthias Ehrgott*

2.5   Joint ORSC / EURO International Conference 2015 on Continuous Optimization

Overview

Continuous optimization is a highly interconnected field, having close relationships to the other areas of OR, with scientific computing and numerical analysis, and with numerous application areas. In order to promote academic communication and cooperation between Chinese and European researchers and practitioners in the field of continuous optimization, Operations Research Society of China (ORSC) and the Association of European Operational Research Societies (EURO) will organize the Joint ORSC/EURO International Conference 2015 on Continuous Optimization during May 10-12, 2015. Dr. Xiaodong Hu (the President of ORSC) and Dr. Gerhard Wäscher (President of EURO) are co-chairs of the conference, Dr. Yuhong Dai (President of the Math Programming Subsociety of ORSC) and Dr. Julius Zilinskas (Chair of EUROPT Managing Board) are the co-chairs of program committee and Dr. Yanqin Bai (Shanghai University, Shanghai) and Dr. Gerhard-Wilhelm Weber (Middle East Technical University, Ankara) are the co-chairs of organization committee.

Invited Speakers

- Dr. Dongdong Ge (Shanghai University of Finance and Economics, China)
- Dr. Yaroslav Sergeyev (University of Calabria, Italy)
- Dr. Vladimir Shikhman (University of Leuven, Belgium)
- Dr. Yaxiang Yuan (Chinese Academy of Sciences, China)

Deadlines & Important Dates

- Abstract submissions: February 13, 2015
- Notification of acceptance of abstracts: February 27, 2015
- Online registration/room reservation: March 13, 2015 (Registration fee is 100 EUR.)
- On-site registration: May 10, 2015
- Conference dates: May 11-12, 2015
- Full paper submissions for special issue: July 10, 2015
- Notification of acceptance of full papers: October 9, 2015
- Final version submissions: November 13, 2015

Conference Topics

We invite submissions on continuous optimization, including (but not limited to) the following topics:

- Linear, Nonlinear, and Convex Programming
- Equilibrium Programming
- Semidefinite and Conic Programming
- Stochastic Programming
- Complementarity and Variational Inequalities
- Nonsmooth and Variational Analysis
- Nonconvex and Global Optimization
- Optimization of Partial Differential Systems
- Applications of Optimization in Engineering, Economics, Finance,
- Statistics, Game Theory, and Bioinformatics
- Energy Modeling and Electric Power Market Modeling
- Optimization Over Computing Grids
- Modeling Languages and Web-based Optimization System

Some Important Points on Abstract Submission & Special Issue

Each attendee is allowed to submit ONE abstract for ONE talk at the conference. Abstracts must be written in English and contain no more than 600 characters (no formulas or mathematical notations are allowed). Abstracts must be submitted through EURO Abstract Submission System at http://www.euro-online.org/conf/orsc-euro-2015/. The deadline for abstract submission is February 13, 2015.

After the conference, it will be possible to submit a full paper for the special issue of the Journal of the Operations Research Society of China published by Springer. The papers must be written in English and submitted through the editorial manager system at http://www.editorialmanager.com/jorc/default.asp. The deadline for full paper submission is July 10, 2015.

Conference Venue and Website

The conference will be held in Shanghai, the largest Chinese city by population and described as the "showpiece" of the booming economy of mainland China. The conference venue is New LeHuLou Hotel in Shanghai University located in the heart of Shanghai. More information could be found at the conference website:

http://orsc-euro2015.csp.escience.cn

2.7 EWG ORD-IFORS Workshop on OR for Development

Submission Deadline Extended to January 30

Call for Participants

EWG ORD- IFORS Workshop on OR for Development
Graham Hills Building, University of Strathclyde, Glasgow, Scotland
July 9-10, 2015 (in conjunction with EURO 2015)

Background
The EURO Working Group on Operational Research for Development (EWG ORD) (http://www.euro-online. org/web/ewg/29/or-for-development-ewg-ord) aims to promote communication and collaboration among researchers working in areas of operational research for development within and outside of EURO. *EWG* ORD actively organized / co-organized workshops or streams on operational research for development in various conferences, which include: EURO 2006, EURO 2007, IFORS 2008, EURO 2009, EURO 2010, IFORS 2011, EURO 2012, EURO 2013 and IFORS 2014. These activities were successful in promoting the importance of operational research and its related techniques to improving living conditions in the developing and developed countries.

Call for Participants
Operations Researchers who have done work in the area of OR for Development are invited to participate. To qualify, participants are required to submit a full paper on their work which has used Operational Research to help optimize development in the light of constraints and limited resources. Topic areas may include: education, health, and other basic services, water, technology, resource use (physical or financial), infrastructure, agricultural/industrialization, environmental sustainability. A stress on developmental issues will be an important factor; papers of a purely technical nature, or those that have no relevance in the developmental context, will not be considered.

Participants who have taken part in previous ICORD/ EWG Workshops and those who have brought their work forward are encouraged to attend to report on developments on their previously presented work.

Conference Format
The Workshop will feature presentations by the participants of their papers. Paper reviewers will be assigned in advance. All participants will be given all the papers of accepted participants in advance, which will give them time to study the other papers. Ample time will be given for a discussion of each of the papers presented. There will also be plenary session/s for invited speakers. Please send your full paper or extended abstracts (not less than 1,500 words) to: Honora Smith honora.smith@ soton.ac.uk.

Important Dates
Extended Abstract Submission: January 30, 2015
Notification of Acceptance: February 6 , 2015

Subsidised Conference Registration Fee
EURO 200, inclusive of materials, snacks & lunch

Support for Participants
A limited number of slots for registration support will be available, and will depend on the quality of material submitted.

For inquiries, please contact:
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Gerhard-Wilhelm Weber gweber@metu.edu.tr

Watch out for announcements on the invited Workshop session and other details to be released mid-January 2015.

2.8   Call for Applications to the ‹‹EthOR Award 2015››

Call for Applications to the

«*EthOR Award 2015*»

The **EthOR Award** is organised by the **EURO Working Group on "Ethics and OR"**, a network that gathers scientists, lecturers and professionals in the field of Operational Research who are committed to inspire OR researchers, teachers, students, consultants and decision-makers to integrate ethical aspects and considerations in their OR research, teaching, consultancy and decision-making (info: http://euro-online.org/web/ewg/24/euro-working-group-on-ethics-and-or).

The purpose of this award is to distinguish an **outstanding Master's Thesis** (MT) promoting ethical dimensions in OR-based studies. Our aim is to encourage young researchers, as members of the future generation of managers and decision-makers, in developing and implementing Operations Research techniques for solving contemporary problems presenting ethical dimensions. Many fields of application may be considered like energy, environment, health care, peace studies, economics, corporate social responsibility, finance and others.

This second edition of the *EthOR Award* will be awarded at the EURO-2015 conference (Glasgow, July 12-15, 2015). To apply, the researcher should prepare an extended **abstract of maximum 6 pages** of the MT, and provide an **accompanying letter** where the academic supervisor(s) should evidence why this work is recommended for the *EthOR Award.*

Both the extended abstract and accompanying letter should be sent electronically (pdf) **BEFORE 31st MARCH 2015** to Dr. Erik Kropat (email: **erik.kropat@unibw.de**), Chair of the EURO Working Group and president of the Award Selection Committee.

The selected **finalists** will be requested to present their work in a special session of the EWG Stream held during the conference, and will receive an official **certificate of excellence** in developing OR techniques and/or applications contributing to ethical decision-making.

The **winner** will get a cash prize of **500€** and full reimbursement of the registration & gala dinner fees at the EURO-2015 conference, and will be also cordially **honoured as keynote speaker** for the next event of the EWG on "Ethics and OR" after the EURO-2015 conference.

Entry requirements

The award will be attributed at the EURO-2015 conference to a Master's Thesis officially approved **during the last three years** before the deadline (after 31st March 2012) and best complying with this purpose.

Applications for the award will be introduced by the academic supervisor(s) of the MT. The extended abstract and the accompanying letter must be written in English. They should clearly explicit the ethical aspects present in the submitted work:

-   either as a direct theoretical contribution to Ethics in OR,
-   or as an important part of some practical problem solved with OR techniques: it should be evidenced how Ethics is taken into account in the decision-making process, in the valuation of alternatives, in the interactions between analysts, decision-makers and stakeholders, etc.

Both the student and the supervisor(s) of the MT may be member(s) of the EWG, or desiring to join.

Selection Process

The EWG Board will designate an *EthOR Award committee* of four members that should not stay in any relationship with any of the applicants. The selection process will proceed in the following steps:

Firstly, the submissions will be analysed by the committee in order to select a shortlist of maximum three finalists. In case no finalist can be found the award will not be attributed. The following non-exhaustive aspects will be scrutinised:

1. Novelty and original contributions of the author(s).
2. Pertinence and applicability for solving contemporary issues with ethical dimensions.
3. Explicit references to the contributions to Ethics and OR as stressed in the accompanying letter and the extended abstract
4. Quality and clarity of the presented documents.

If necessary, for preparing the shortlist, the committee may require from some applicants to provide the full MT in electronic form.

Secondly, the selected **finalists** will be informed before April 12th and requested to submit a short abstract for the Award Session of the stream on "Ethics and OR", that will be held during the EURO-2015 conference.

Finally, in this session, the finalists will have **20 minutes to present** their work, explaining details and questions by the members of the award committee. They will make the final deliberation in private after the presentations to designate the winning MT, although the award may not be attributed if the quality of the presentations is not considered sufficient. The nominee will be announced by the president of the award committee on the last session of the stream on "Ethics and OR". The certificate will then be handed over to the finalists.

3   New Books/Publications

This section presents a list of papers published in 2014, 2015 or to appear. This list is by no means exhaustive. If you want your recent publications to appear in the next newsletter, please send an email with the complete citation of your work to lucie.galand@dauphine.fr.

3.1   Book chapter

Huynh C. H., Simon J., Keller L. R., **Decision Technologies**, *Section V. Old and new issues in judgment and decision making*, *in Wiley-Blackwell Handbook of Judgment and Decision Making: An Interdisciplinary Perspective*, eds. Gideon Keren and George Wu. Malden (MA): Blackwell, 2015.

3.2   Journal papers

Adler N., Hakkert A. S., Raviv T., Sher M., **The Traffic Police Location and Schedule Assignment Problem**, *Journal of Multi-Criteria Decision Analysis*, 21(5-6):315-333, http://dx.doi.org/10.1002/mcda.1522, 2014.

Aguarón J., Escobar M.T., García-Alcaraz J.L., Moreno-Jiménez J.M., Vega A, **A new synthesis procedure for TOPSIS based on AHP**, *DYNA*, to appear.

Aguarón J., Escobar M.T., Moreno-Jiménez J.M, **Precise Consistency Consensus Matrix in an AHP-Group Decision Making Local Context**, *Annals of Operations Research*, doi: 10.1007/s10479-014-1576-8, 2014.

Aguayo E.A., Mateos A., Jiménez-Martín A., **A new Dominance Intensity Method to Deal with Ordinal Information About a DM's Preferences within MAVT**, *Knowledge-Based Systems*, 69:159-169, 2014.

Aloulou M.A., Bouzaiene A., Dridi N., Vanderpooten D., **A bicriteria two-machine flow-shop serial-batching scheduling problem with bounded batch size**, *Journal of Scheduling*, 17(1):17-29, 2014.

Alves M.J., Antunes C.H., Clímaco J., **Interactive MOLP Explorer - a graphical-based computational tool for teaching and decision support in multi-objective linear programming models**, *Computer Applications in Engineering Education*, to appear.

Antunes C. H., Oliveira E., Lima P., **A multi-objective GRASP procedure for reactive power compensation planning**, *Optimization and Engineering*, 15(1):199-215, 2014.

Asadi E., Gameiro da Silva M. C., Antunes C.H., Dias L., Glicksman L., **Multi-objective optimization for building retrofit: a model using genetic algorithm and artificial neural network and an application**, *Energy and Buildings*, 81:444-456, 2014.

Atahran A., Lenté C., T'kindt V., **A Multicriteria Dial-a-Ride Problem with an Ecological Measure and Heterogeneous Vehicles**, *Journal of Multi-Criteria Decision Analysis*, 21(5-6):279-298, http://dx.doi.org/10.1002/mcda.1518, 2014.

Bagirov A., Miettinen K., Weber G.W., **Preface of the special issue on OR: Connecting Sciences Supported by Global Optimization related to the 25th European conference on operational research (EURO XXV 2012)**, *Journal of Global Optimization*, 60(1):1-3, 2014.

Bazgan C., Jamain F., Vanderpooten D., **Approximate Pareto sets of minimal size for multi-objective optimization problems**, *Operations Research Letters*, 43(1):1-6, 2015.

Belhoul L., Galand L., Vanderpooten D., **An efficient procedure for finding best compromise solutions to the multi-objective assignment problem**, *Computers and Operations Research*, 49:97-106, 2014.

Carvalho A. L., Antunes C.H., Freire F., Henriques C., **A hybrid input-output multi-objective model to assess economic-energy-environment trade-offs in Brazil**, *Energy*, to appear.

Couto, A.B.G.; Gomes, L.F.A.M. **Multicriteria Analysis of Business Indicators through DRSA - Dominance-based Rough Set Approach.** *Pesquisa Operacional para o Desenvolvimento*, 6:410-433, 2014.

Couto, A.B.G.; Gomes, L.F.A.M. **Multicriteria Evaluation of Managerial Competences: An Application of the Dominance Principle and the Rough Set Theory**. *Foundations of Computing and Decision Sciences*, 39:157-174, 2014.

Dandurand B., Guarneri P., Fadel G.M., Wiecek M.M., **Bilevel multiobjective packaging optimization for automotive design**, *Structural and Multidisciplinary Optimization*, 50(4):663-682, 2014.

Dudas C., Ng A.H.C., Boström H., **Post-analysis of multi-objective optimization solutions using decision trees**, *Intelligent Data Analysis*, 19(2), 2015.

Gomes L.F.A.M., Araujo R.M., Machado M.A.S. **Retail location analysis with TODIM-FSE**. *Tecnologia & Cultura*, 16:45-51, 2014.

Gouveia M. C., Dias L., Antunes C.H., **Benchmarking of maintenance and outage repair in an electricity distribution company using the Value-Based DEA method**, *Omega*, to appear.

Henriques C. O., Coelho D., Antunes C. H., **A multi-objective input-output model to assess E4 impacts of building retrofitting measures to improve energy efficiency**, *Technological and Economic Development of the Economy*, to appear.

Henriques C.O., Coelho D., Antunes C.H., **Coupling Input-Output Analysis with Multiobjective Linear Programming Models for the study of Economy-Energy-Environment-Social (E3S) trade-offs: A review**, *Annals of Operations Research*, to appear.

Henriques C. O., Antunes C. H., Barrico C., **An enumerative algorithm for computing all possibly optimal solutions to an interval LP**, *TOP*, 22(2):530-542, 2014.

Kangas A., Hartikainen M., Miettinen K., **Simultaneous Optimization of Harvest Schedule and Measurement Strategy**, *Scandinavian Journal of Forest Research*, 29(Sup 1):224-233, 2014.

Luque M., Lopez-Agudo L.A., Marcenaro O.D., **Equivalent reference points in multiobjective programming**, *Expert Systems with Applications*, 42(4):2205-2212, 2015.

Luque M., Marcenaro O.D., Lopez-Agudo L.A., **On the potential balance among compulsory education outcomes through econometric and multiobjective programming analysis**, *European Journal of Operational Research*, 241(2):527-540, 2015.

Mateos A., Jiménez A., Aguayo E.A., Sabio P., **Dominance Intensity Measuring Methods in MCDM with Ordinal Relations Regarding Weights**, *Knowledge-Based Systems*, 70:26-32, 2014.

Mattila V., Virtanen K., **Maintenance scheduling of a fleet of fighter aircraft through multi-objective simulation-optimization**, *SIMULATION: Transactions of The Society for Modeling and Simulation International*, 90(9):1023-1040, 2014.

Mehta V. K., Dasgupta B., **Parametric Approximation of the Pareto Set in Multi-Objective Optimization Problems**, *Journal of Multi-Criteria Decision Analysis*, 21(5-6):335-362, http://dx.doi.org/10.1002/mcda.1515, 2014.

Miettinen K., **Survey of Methods to Visualize Alternatives in Multiple Criteria Decision Making Problems**, *OR Spectrum*, 36(1):3-37, 2014.

Miettinen K., Mustajoki J., Stewart T.J., **Interactive Multiobjective Optimization with NIMBUS for Decision Making under Uncertainty**, *OR Spectrum*, 36(1):39-56, 2014.

Mönkkönen M., Juutinen A., Mazziota A., Miettinen K., Podkopaev D., Reunanen P., Salminen H., Tikkanen O.-P., **Spatially Dynamic Forest Management to Sustain Biodiversity and Economic Returns**, *Journal of Environmental Management*, 134:80-89, 2014.

Moreno-Jiménez J.M., Cardeñosa J., Gallardo C., de la Villa-Moreno M.A., **A new e-learning tool for cognitive democracies in the Knowledge Society**, *Computers in Human Behavior*, 30:9-18, doi:10.1016/j.chb.2013.04.027, 2014.

Moreno-Jiménez J.M., Garcallo P., Salvador M., Altuzarra A., **Systemic Decision Making: A Bayesian Approach in AHP**, *Annals of Operations Research*, doi: 10.1007/s10479-014-1637-z, 2014.

Moreno-Jiménez J.M., Pérez Espés C., Velázquez M., **E-Cognocracy and the Design of Public Policies**, *Government Information Quarterly*, 31:185-194, doi: 10.1016/j.giq.2013.09.004, 2014.

Muerza V., De Arcocha D., Larrodé E., Moreno-Jiménez J.M., **The Multicriteria Selection of Products in Technological Diversification Strategies: an Application to the Spanish Automotive Industry based on AHP**, *Production Planning and Control: The Management of Operations*, 25(8):715-728, doi: 10.1080/09537287.2013.798089, 2014.

Muerza V., Larrodé E., Moreno-Jiménez J.M., Royo B., **Technological competitiveness in transportation companies**, *DYNA*, to appear.

Nolz P.C., Absi N., Feillet D., **A Bi-Objective Inventory Routing Problem for Sustainable Waste Management Under Uncertainty**, *Journal of Multi-Criteria Decision Analysis*, 21(5-6):299-314, http://dx.doi.org/10.1002/mcda.1519, 2014.

Ogryczak W., Luss H., Pióro M., Nace D., Tomaszewski A., **Fair Optimization and Networks: A Survey**, *Journal of Applied Mathematics*, 2014:1-25, http://dx.doi.org/10.1155/2014/612018, 2014.

Ojalehto V., Miettinen K., Laukkanen T., **Implementation Aspects of Interactive Multiobjective Optimization for Modeling Environments: The Case of GAMS-NIMBUS**, *Computational Optimization and Applications*, 58(3):757-779, 2014.

Paredes-Frigolett H., Pyka A., Pereira J., Gomes L.F.A.M., **Ranking the performance of national innovation systems in the Iberian peninsula and Latin American from a neo-Schumpeterian economics perspective**, *Forschungszentrum Innovation und Dienstleistung Discussion Papers*, Universität Hohenheim, 95:1-27, 2014.

Rancourt M.E., Paquette J., **Multicriteria Optimization of A Long-Haul Routing and Scheduling Problem**, *Journal of Multi-Criteria Decision Analysis*, 21(5-6):239-255, http://dx.doi.org/10.1002/mcda.1516, 2014.

Salehizadeh M. R., Rahimi-Kian A., Hausken K., **A Leader–Follower Game on Congestion Management in Power Systems**, *Game Theoretic Analysis of Congestion, Safety and Security*, 81-112, 2015.

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Salvador M., Altuzarra A., Gargallo P., Moreno-Jiménez J.M., **A Bayesian Approach for maximising inner compatibility in AHP-Systemic Decision Making**, *Group Decision and Negotiation*, doi: 10.1007/s10726-014-9407-5, 2014.

Sánchez-Lozano J., Antunes C.H., García-Cascales M.S., Dias L.C., **GIS-based Photovoltaic Solar Farms site selection using ELECTRE-TRI: Evaluating the case for Torre-Pacheco, Murcia, Southeast of Spain**, *Renewable Energy*, 66:478-494, 2014.

Sindhya K., Ojalehto V., Savolainen J., Niemistö, H., Hakanen, J., Miettinen, K., **Coupling Dynamic Simulation and Interactive Multiobjective Optimization for Complex Problems: An APROS-NIMBUS Case Study**, *Expert Systems with Applications*, 41(5):2546-2558, 2014.

Soares A., Gomes A., Antunes C. H., Oliveira C., **A multi-objective genetic approach to domestic load scheduling in an energy management system**, *Energy*, 77:144–152, 2014.

Simon J., Kirkwood C.W., Keller L.R., **Decision Analysis with Geographically Varying Outcomes: Preference Models and Illustrative Applications**, *Operations Research*, 62(1):182-194, 2014.

Steponavice I., Ruuska S., Miettinen K., **A Solution Process for Simulation-based Multiobjective Design Optimization with an Application in Paper Industry**, *Computer-Aided Design*, 47:45-58, 2014.

Tam B. Ryan D., Ehrgott M., **Multi-objective Approaches to the Unit Crewing Problem in Airline Crew Scheduling**, *Journal of Multi-Criteria Decision Analysis*, 21(5-6):257-277, http://dx.doi.org/10.1002/mcda.1517, 2014.

Vega A., Aguarón J., García-Alcaraz J., Moreno-Jiménez J.M., **Notes on dependent attributes on TOPSIS**, *Procedia Computer Science*, 31:308-317. Doi: 10.1016/j.procs.2014.05.273, 2014.

Vicente E., Mateos A., Jiménez-Martín A., **Risk Analysis in Information Systems: a Fuzzification of the MAGERIT Methodology**, *Knowledge-Based Systems*, 66:1-12, 2014.

Vicente E., Mateos A., Jiménez-Martín A., **Selection of Safeguards for Fuzzified Risk Management in Information Systems**, *New Perspectives in Information Systems and Technologies, vol. 1, Advances in Intelligent Systems and Computing*, 275:267-276, 2014.

Zanazzi J.L., Gomes L.F.A.M., Dimitroff M., **Group decision making applied to preventive maintenance systems**, *Pesquisa Operacional*, 34:91-105, 2014.

3.3   Conference proceedings

Carrasqueira P., Alves M.J., Antunes C.H., **An improved multiobjective electromagnetism-like algorithm**, A.I. Esparcia-Alcázar et al. (Eds.), *Applications of Evolutionary Computation - EvoApplications 2014*, Lecture Notes in Computer Science, 8602:627–638, 2014.

Mattila V., Muttilainen L., Virtanen K., Jylhä J., Väisänen V., **Optimizing locations of decoys for protecting surface-based radar against anti-radiation missile with multi-objective**

ranking and selection, Proceedings of the *2014 Winter Simulation Conference*, 2319-2330, 2014.

Ogryczak W., **Fair Optimization - Methodological Foundations of Fairness in Network Resource Allocation**, IEEE *38th Annual Computer Software and Applications Conference*, 43-48, http://dx.doi.org/10.1109/COMPSACW.2014.11, 2014.

Pérez Espés C., Wimmer M., Moreno-Jiménez J.M., **A Framework for Evaluating the Impact of E-Participation Experiences**, *Electronic Government and Electronic Participation, Joint Proceedings of IFIP EGOV 2014 and ePart 2014*, 21:20-29, 2014.

3.4   Reports

Ojalehto V., Podkopaev D., Miettinen K., **Agent-based Interactive Approach for Computationally Demanding Multiobjective Optimization Problems**, *Reports of the Department of Mathematical Information Technology*, Series B, Scientific Computing, No. B 6/2014, University of Jyväskylä, 2014.

Steponavice I., Miettinen K., **Multiobjective Optimization and Model Predictive Control: A Survey**, *Reports of the Department of Mathematical Information Technology*, Series B, Scientific Computing, No. B 1/2014, University of Jyväskylä, 2014.

4   Past Conferences, Workshops, and other News

4.1   Prof. Kaisa Miettinen Invited to the Finnish Academy of Science and Letters

In 2014, 31 new Finnish members were invited to the [Finnish Academy of Science and Letters](#) of who 12 are not from Helsinki. Among them, was Professor Kaisa Miettinen from the University of Jyvaskyla. The Finnish Academy of Science and Letters is divided into two Sections, representing science and the humanities, each grouped internally by disciplines, 7 in science and 8 in the humanities, with a fixed number of members representing each discipline. Membership is granted to meritorious Finnish scholars, by invitation only. The Academy has also had the custom since 1924 of appointing foreign members.

Finnish Academy of Science and Letters is the largest general scientific and academic society in Finland. It is a learned society covering the full range of academic disciplines which is devoted to the promotion of scientific and scholarly research and serves as a bond uniting researchers engaged in these activities at the highest level. It functions as a traditional learned society in the sense that its membership is limited and it selects its new members on their academic and scientific merits. It pursues its declared aims by arranging lectures and discussion meetings, publishing scientific papers, awarding grants and making recommendations and statements of opinion to the authorities in matters concerned with scientific and academic research and those who practice it. The Academy is represented on many scientific committees and in various organizations and foundations.

4.2   A Report on the Activities of the INFORMS MCDM Section at the INFORMS Annual Meeting in San Francisco, California (USA), November 9-12, 2014.

The MCDM Section was established in 2010, having had its roots in the International Society on Multiple Criteria Decision Making dating from 1979. For the 2014 INFORMS conference, the Section President Pekka Korhonen organized an MCDM cluster, making a properly presence at the conference under consideration.

The MCDM Section in the Minneapolis conference had a *Sponsored Cluster* with 12 sessions, including 36 talks (starting Sunday morning, ending Tuesday afternoon). The sessions covered a wide spectrum within MCDM. Furthermore, Matthias Ehrgott presented a tutorial on "*Exact Methods for Multi-Objective Combinatorial Optimization*". The Section plans at the INFORMS Annual Meeting 2015 in Philadelphia to expand its presence at the conference. Matthias Ehrgott (m.ehrgott@lancaster.ac.uk) will be in charge for organizing the MCDM stream. If you are interested in organizing a session, please send an email to Matthias.

Fruitful discussions after the Business Meeting.

The business meeting was well-attended and the stage for lively discussions. The minutes of the business meeting can be found at http://www.informs.org/Community/MCDM clicking the link "Bylaws-and-Meeting-Minutes."

In the elections conducted later, Margaret M. Wiecek (Clemson University in South Carolina, USA. President for 2016 [to succeed Matthias Ehrgott]) was elected as the new Vice President and Johannes Siebert (University of Bayreuth, Germany) was reelected as the Secretary/Treasurer for 2015. Kalyanmoy Deb (Department of Electrical and Computer Engineering in Michigan State University (MSU), East Lansing, USA), and Canan Ulu (Georgetown University's

McDonough School of Business, United States) were elected as the new Board members serving two years.

The term of Pekka Korhonen ends at the end of 2014, and he will serve as an ex-officio board member in 2015. He thanked his members of the Section for their support and participation. Matthias Ehrgott will serve as the new president during 2015.

Overall the San Francisco INFORMS conference was a success for the MCDM Section with high quality talks attracting a large audience. The MCDM Section has reached over 230 members. While this is a healthy growth, the size of the MCDM researchers and practitioners worldwide shows a potential of further growth. The MCDM Section urges its members to be involved in recruiting new members. The stronger we get, the more powerful we will be in convincing others about our issues. Membership is open to anyone interested in MCDM.

To become a member or to renew your membership for 2015, visit http://www.informs.org/Community/MCDM. The dues for 2015 are $5 for INFORMS members and $7 for others.

Johannes Siebert

Secretary and Treasurer of the MCDM Section (INFORMS)

4.3   A Report on the fifth Dagstuhl Seminar on "Multiobjective Optimization "

The fifth Dagstuhl seminar on Multiobjective Optimization, organized this time by Salvatore Greco (University of Catania, IT, and Portsmouth University, UK), Kathrin Klamroth (Universität Wuppertal, DE), Joshua Knowles (Manchester University, UK) and Günter Rudolph (TU Dortmund, DE) took place from January 12 to 16, 2015, at Schloss Dagstuhl (Wadern, Germany). The seminar, titled "Understanding Complexity in Multiobjective Optimization", gathered together 48 international researchers from the fields of Multiple Criteria Decision Making (MCDM) and Evolutionary Multiobjective Optimization (EMO).

Sixteen topical presentations were complemented by discussions in six working groups, covering the main themes of the seminar: Complexity in Preferences, Complexity in Optimization, and Complexity in Applications. Specific topics included "Behavior-Realistic Artificial Decision-Makers to Test Preference-Based Multi-Objective Optimization Methods", "Computational Complexity", "Heterogeneous Functions", "Complexity in Multiobjective Metamodels", "Visualization in Multiobjective Optimization", and "Composition Architectures for Optimization of Interwoven Systems". Almost all working groups split into subgroups in order to focus more strongly on different aspects of the topics considered.

On Wednesday afternoon, the customary seminar photograph was taken on the steps up to the Schloss. Afterwards, even though the weather was not clement, a group of researchers walked near the seminar venue in the Dagstuhl forest, and visited the ruins of the ancient Dagstuhl castle.

On Thursday evening, all researchers had the pleasure to participate in the Wine and Cheese party held in the music room of the castle. The event was kindly sponsored by the "EPSRC Centre for Innovative Manufacturing in Emergent Macromolecular Therapies" hosted at UCL in collaboration with the Imperial College London.

Unwearied by the previous night's festivities, all working groups presented their results in a closing session on Friday morning. Several groups plan to submit extended versions of their reports to the special issue on "Understanding Complexity in Multiobjective Optimization" of the Journal of Multicriteria Decision Analysis, edited by Theo Stewart (submission deadline is July 31, 2015). After these presentations, all participants said goodbye to each other looking forward to meeting at the next Dagstuhl seminar which is planned for 2018. Margaret M. Wiecek (Clemson University, South Carolina, USA) will replace Salvatore Greco in the team of organizers. The team has already started vigorously discussing a theme for 2018 which would reflect the growing interest in and need of MCDM and EMO.

Salvatore Corrente, Salvatore Greco, Kathrin Klamroth, Joshua Knowles, Günter Rudolph, and Margaret Wiecek

4.4   A Report on EURO PhD School on Multicriteria Decision Making with Mathematical Programming

1. EPS on MCDM with MP

The first EURO PhD School, devoted to Multicriteria Decision Making with Mathematical Programming (EPS on MCDM with MP), was held in the Faculty of Mathematical Sciences of Complutense University of Madrid, on February 17th to 28th of 2014.

A website with the relevant information and documents have been developed (www.mat.ucm.es/imeio/cursos/EPS_MCDM/).

EURO PhD Schools are an instrument established by EURO (Association of European Operational Research Societies) to encourage the organization of post-graduate education initiatives for PhD students under a school format characterised by being training-oriented and addressed to PhD students.

This EPS is an activity of the PhD programme on Mathematical Engineering, Statistics and Operational Research (IMEIO), joint programme of Complutense University of Madrid and Technical University of Madrid. This is an ambitious programme that aims to unite most powerful researchers in Madrid of applied mathematics, statistics and operational research, and its applications in many different areas (www.mat.ucm.es/imeio).

The EPS on MCDM has offered a unique opportunity for young students beginning their research to get into contact with renowned researchers and to practice in the field of multicriteria decision making and mathematical programming. It has been a big experience for students, being the networking created between them one of the most valuable results of this course.

Group picture in Toledo

2. People

The chairs of the EPS were the professors of the Complutense University of Madrid Juan Tejada (Coordinator of the PhD programme IMEIO) and Begoña Vitoriano.

The scientific committee was formed by relevant researchers on the MCDM topic:

Rafael Caballero (University of Málaga, Spain)
Xavier Gandibleux (University of Nantes, France)
Dylan Jones (University of Portsmouth, UK)
Carlos Romero (Technical University of Madrid, Spain)
Begoña Vitoriano (Complutense University of Madrid, Spain)

Participants had to be or be studying in a EURO member society country. They had to be enrolled in a PhD. Programme, preferably, in early stages of their studies. For a maximum number of 30 participants, there were 60 applicants showing the interest into the school. After a selection process, 29 students coming from 13 European countries participated, including students from other continents (India, Mexico and Venezuela).

There were two different groups of instructors of the EPS on MCDM with different skills, those ones who taught the theoretical contents and those ones who led the training. The instructors of theoretical classes were renowned researchers of the multicriteria decision making world, being the training instructors experts on applied mathematical programming and with knowledge of multicriteria decision making.

Instructors of theoretical classes:

Carlos Romero (Technical University of Madrid, Spain)
Xavier Gandibleux (University of Nantes, France)
Francisco Ruiz (University of Malaga, Spain)
Dylan Jones (University of Portsmouth, UK)

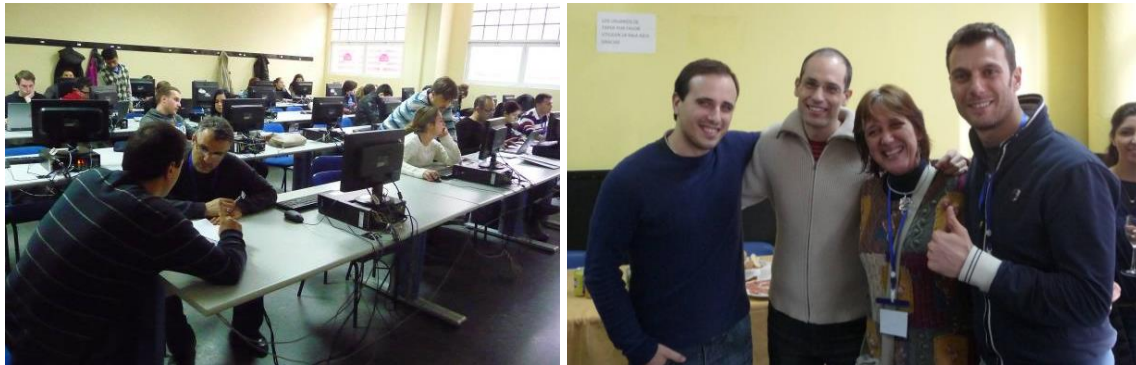*Theoretical classes with Professor Ruiz and Professor Romero*

Instructors of supervised training:

Begoña Vitoriano (Complutense University of Madrid, Spain)

Gregorio Tirado (Complutense University of Madrid, Spain)
F. Javier Martín-Campo (Complutense University of Madrid, Spain)
Federico Liberatore (HUMLOG research group of Complutense University, Spain)

Supervised training. Instructors: F.J. Martín-Campo, G. Tirado, B. Vitoriano, F. Liberatore

3. Programme

The course was designed to be very practical, following each day 2 hours of theoretical classes where new concepts and methods were introduced, 3 hours of supervised training in a computing classroom, and 2 hours of personal work.

The EPS focused on multicriteria decision making with mathematical programming, i.e., on the continuous methods of multicriteria decision making. Contents were as follows:

1. Basic Concepts on Multicriteria Decision Making
2. Multiobjective Programming
3. Compromise Programming
4. Multicriteria Interactive Methods
5. Goal Programming
6. Preferences and Social Choice

One of the most appreciated features by participants was the training-oriented methodology of the course based on case studies. A different problem was assigned to each group on first day of the EPS, working on it all along the course and leading to a final presentation on the last day. Students showed a high degree of motivation and involvement. The case studies proposed and the final presentations can be seen in the website. Here is the list of these case studies, some of them based on published works:

1. Humanitarian Logistics (Ortuño, Tirado, Vitoriano (2010) *TOP*)
2. Energy planning (Linares (1997) www.iit.upcomillas.es/~pedrol/documents/energia97.pdf)
3. Unit Commitment (Ramos, Sánchez, Sarabia, Vitoriano (2007) www.iit.upcomillas.es/aramos/intro_simio.htm)
4. Hospital management (Arenas, Bilbao, Caballero, Gómez, Rodríguez, Ruiz (2002) *JORS*)

Final presentations and awarding diplomas

Besides the academic programme, a wide social programme was included in order to meet the objectives of strengthening ties between the participants. Some of the social activities were: Guided tours in Madrid and Museum El Prado, Dinner and Flamenco show, Guided tour to Toledo, Closing dinner...

4. Sponsoring and acknowledgments

We want to acknowledge especially to EURO for this initiative and its support. Also to other sponsors as the Faculty of Mathematical Sciences (http://matematicas.ucm.es/), the Institute of Interdisciplinary Mathematics (IMI), (http://www.mat.ucm.es/imi/), and the Department of Statistics and Operational Research (https://www.ucm.es/dpeio), all of them of Complutense University of Madrid. Besides, we want to acknowledge their cooperation to those entities which collaborated and supported the organisation along the EPS (Madrid Convention Bureau, El Prado Museum, JC Rooms Hotel Santo Domingo, staff of the Faculty).

Finally, we want to acknowledge to the participants in the EPS, instructors and students, by their friendly character. The EPS can be said to have been a success thanks to the dedication of the instructors and student involvement and motivation.

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5   Imprints

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We are working on publishing the newsletter of the International Society on Multiple Criteria Decision Making two times a year. The deadline for contributions for the February issue is January 20th and the deadline for the September issue is August 20th. Contributions can be sent at any time to the editor (please see the address provided above). Please send your contribution in word-format.