

Newsletter 29 of EUROPT

EUROPT - The Continuous Optimization Working Group of EURO

 $\rm http://www.iam.metu.edu.tr/EUROPT/$

April 2013

Message from the Chair

Dear Colleagues,

Welcome to our Spring 2013 Newsletter. In this issue, you will find several announcements related to the following events and initiatives.

- EUROPT 2013 Meeting of the Continuous Optimization Working Group of EURO, Florence, Italy, June 26-28, 2013. This will be a satellite meeting of the joint EURO/INFORMS conference.
- Computational Nonlinear Optimization: Model Development, Algorithms, Software, and Applications. An intensive course presented at Széchenyi István University, Gyor, Hungary, May 13-24, 2013.
- Open positions at Portsmouth Business School, United Kingdom.
- EURO Mini-conference on Optimization in the Natural Sciences. University of Aveiro, Portugal, February 5-9, 2014.
- Invitation and Call for Papers for the 2014 IFORS Prize for OR in Development, to be awarded at the topical conference "The Art of Modeling", Barcelona, Spain 13-18 July 2014.
- VIII Summer School "Achievements and Applications of Contemporary Informatics, Mathematics and Physics" (AACIMP 2013), August 1-17, 2013, Kyiv, Ukraine.
- Numerical Computations: Theory and Algorithms, International Conference and Summer School, June 17 23, 2013, Eurolido Hotel, Falerna (CZ), Tyrrhenian Sea, Italy.
- 9th International Conference on Optimization: Techniques and Applications (ICOTA 9), Taipei, Taiwan, December 12-16, 2013.

Please pass around the information to your colleagues. As always, we welcome professional news related to the broad subject of Continuous Optimization for our Newsletter. New members are also welcome, please spread the news!

Best regards,

Janos

Janos D. Pinter, PhD, DSc

Proprietor & Research Scientist Pinter Consulting Services, Inc., Canada http://www.pinterconsulting.com janos.d.pinter@gmail.com

Chair, EUROPT Managing Board
The Continuous Optimization Working Group of EURO
http://europt.iam.metu.edu.tr/

ANNOUNCEMENTS

Meeting of the Continuous Optimization Working Group of EURO Florence, Italy, June 26-28, 2013,

www.europt2013.org/

We are proud to announce that the next EUROPT meeting will be held in Florence. The workshop will be chaired by Laura Palagi (Sapienza, Universit di Roma) and Fabio Schoen (Universit degli Studi di Firenze). EUROPT 2013 will be a satellite meeting of the joint EURO/INFORMS conference held in Rome July 1-4, 2013, see: euro2013.org

WORKSHOP TOPICS:

The primary objectives of EUROPT are to disseminate state-of-the-art knowledge and to support research in the broad area of continuous optimization. The Workshop will feature a series of invited lectures, together with invited and contributed sessions.

Topics include, but are not limited to, the following:

- Linear and nonlinear optimization
- Large-scale optimization
- Mixed integer nonlinear optimization
- Derivative-free optimization
- Global optimization
- Local nonlinear optimization
- Complementarity and variational problems
- Conic optimization and semidefinite programming
- Complexity and efficiency of optimization algorithms
- Convex and nonsmooth optimization
- Optimal control
- Multiobjective optimization
- Robust optimization
- Semi-infinite programming
- Stochastic optimization
- Optimization in data mining
- Optimization in industry, business and finance
- Analysis and engineering of algorithms
- Software development

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Gesualdo Scutari, SUNY at Buffalo

Tamas Terlaky, Lehigh University

Tatiana Tchemisova, University of Aveiro

Philippe Toint, Universite de Namus

Luis Nunes Vicente, Universidade de Coimbra

Gerhard Wilhelm Weber, Middle East Technical University

LOCATION AND VENUE:

The EUROPT Workshop will be held in Florence (Italy), hosted by the University of Florence. Florence is one of the top destinations for culture, art and tourism, and it is widely recognized as one of the most beautiful cities of the world.

IMPORTANT DATES:

Workshop: June 26th - 28th, 2013

FURTHER INFORMATION:

Website: www.europt2013.org; Email: europt2013@gmail.com

Computational Nonlinear Optimization: Model Development, Algorithms, Software, and Applications

Széchenyi István University, Gyor, Hungary, May 13-24, 2013,

http://uni.sze.hu/en_GB/home.

An intensive course presented by János D. Pintér, PhD, DSc PCS Inc. & Dalhousie University, Canada www.pinterconsulting.com

Venue and Dates:

Széchenyi István University, Gyor, Hungary, May 13-24, 2013 http://uni.sze.hu/ en_{GB} /home

Summary

The course will be presented in 10 days, with the intention of covering materials equivalent to a full university semester. Three hours of lectures will be presented per day (Monday to Friday); a corresponding similar amount of daily study effort is expected from the attendees.

Course attendees - university students and professionals - should have sufficient undergraduate mathematics background (calculus, algebra, probability); systems modeling and computational / programming experience will be an asset. Upon completing the course, attendees will receive an official attendance certificate from the University and the presenter.

The course attendance fee is EURO 600.00 for professionals, but it is free for students currently enrolled at degree-granting universities located within the European Union. All attendees will receive the complete set of presentations and a collection of related materials (e-books and articles).

For further details, feel free to contact Dr. Pintér at janos.d.pinter@gmail.com.

Open positions at Portsmouth Business School,

Dear colleagues,

Following our strong student recruitment and research outputs, the Portsmouth Business School of the University of Portmsouth is hiring 13 new lecturers and senior lecturers. In particular my Operations Research and Logistics Team is searching a lecturer and a senior lecturer in Operations Management and Business Information Systems (10007833 and 10007834). Applications are open to EU and non-EU applicants. Only online applications will be accepted:

http://www.port.ac.uk/departments/faculties/portsmouthbusinessschool.

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EURO Mini-conference on Optimization in the Natural Sciences

University of Aveiro, February 5-9, 2014

First Call for Abstracts

Dear Colleagues,

Organizers of the EUROMini-conference on Optimization in the Natural Sciences (EURO-mini 2014) have a pleasure inviting you to take part in this conference to be held in Aveiro, Portugal on 5-9 February, 2014.

Aims and Scope

The conference aims at discussing the latest research in optimization and its applications in the natural sciences. The main objective of the meeting is to encourage the exchange of knowledge and recent achievements, and to establish collaborations among researchers and practitioners working in the areas of Computer Science / Optimization / Statistics, and Physics / Chemistry / Biology / Medical Sciences.

Conference Topics

Topics of interest include, but are not limited to the following general and more specific areas:

- Analysis of microarray data or next generation sequencing
- Applications of modeling and optimization in physics, biology, chemistry, and medicine
- Billiard theory and applications
- · Biomedical engineering
- Design optimization
- Data visualization for optimal decisions
- Image processing
- Infinite and semi-infinite optimization with applications

- Inverse problems
- Linear and nonlinear optimization and applications
- Multi-criteria optimization with applications
- Multi-scale optimization with applications
- Optimal control applied to biological models
- Optimal mass transfer
- Optimization in bioinformatics and computational biology
- Shape optimization
- Solution of optimization problems using statistical methods
- · Statistics in high-dimensional data
- Statistical methods and visualization
- Statistical and probabilistic modelling
- Wave scattering

Abstracts must be written in English and contain no more than 600 characters (no formulas or mathematical notations are allowed). Each attendee is allowed to present ONE paper at the conference. To submit an abstract, use the abstract submission system of EURO-Online that soon will be available on the conference website

Organizing committee

- Tatiana Tchemisova (co-chair)
- Alexander Plakhov (co-chair)
- Adelaide Freitas (co-chair)
- António Pereira
- João Pedro Cruz
- Jorge Sá Esteves
- Paula Carvalho
- Paula Rama
- Pedro Macedo
- Vera Afreixo

Secretariat: Neuza Lagarto

Programm Committee

- Adelaide Freitas (University of Aveiro, Portugal)
- Adil Bagirov (University of Ballarat, Australia)
- Adilson Elias Xavier (Federal University of Rio de Janeiro, Brazil)
- Alexander Dudin (Belarusian State University, Belarus)
- Alexander Plakhov (University of Aveiro, Portugal)
- Andreia Hall (University of Aveiro, Portugal)
- Boris T. Polyak (Institute of Control Problems, Moscow, Russia)
- Delfim F. M. Torres (University of Aveiro, Portugal)

- Domingos M. Cardoso (University of Aveiro, Portugal)
- Gerhard Wilhelm Weber (Middle East Technical University, Turkey)
- János D. Pintér (Pintér Consulting Services, Inc., Canada)
- Joaquim Judice (University of Coimbra, Portugal)
- Julius Žilinskas (Vilnius University, Lithuania)
- Kathrin Klamroth (University of Wuppertal, Germany)
- Leonidas Sakalauskas (Institute of Mathematics, Vilnius University, Lithuania)
- Lisete de Sousa (University of Lisbon, Portugal)
- Luis Nunes Vicente (University of Coimbra, Portugal)
- Luzia Gonçalves (IHMT, Portugal)
- Mourad Elloumi (University of Tunis-El Manar, Tunísia)
- Olga Kostyukova (Institute of Mathematics, Belarusian Academy of Sciences, Belarus)
- Oliver Stein (Karlsruhe Institute of Technology, Germany)
- Purificación Galindo (University of Salamanca, Spain)
- Tatiana Tchemisova (University of Aveiro, Portugal)
- Vera Rostschina (University of Ballarat, Australia)
- Vladimir Bushenkov (University of Evora, Portugal)

Invited speakers

- Giuseppe Buttazzo, Dipartimento di Matematica de Pisa, Italy, http://www.dm.unipi.it/pages/buttazzo/
- Sergey Tabachnikov, Pennsylvania State University Department of Mathematics, USA, http://www.math.psu.edu/tabachni/
- Leonid Bunimovich, Georgia Institute of Technology, Atlanta, USA, http://people.math.gatech.edu/~bunimovh/
- Michael Greenacre, Department of Economics and Business at the University Pompeu Fabra, Barcelona, Spain, http://www.barcelonagse.eu/faculty.php?id=118
- Georgiy Smirnov, University of Minho, Portugal, http://intranet.uminho.pt/4881.page
- Aleksandr Dudin, Belarusian State University, Belarus, http://www.apa.bsu.by/

Special Issue:

Papers presented at EURO mini 2014 will be considered for peer-reviewed publication in a special issue of Optimization

Important dates:

• Deadline for Submission: 1/11/2013

Notification of Acceptance: 15/11/2013

• Deadline for inclusion to the abstract book: 15/01/2014

Registation fees:

Normal (before 1/12/2013): 285 euros

• Normal (late): 360 euros

• Student (before 1/12/2013): 150 euros

• Student (late): 200 euros

Accompanying person: 50 euros

Venue:

The workshop will be held in Aveiro city, Portugal.

Aveiro is located 90km from the Porto Airport (English: Oporto) and 250km from Lisbon Airport. However is quite easy and quick to travel from any of these cities to Aveiro: 2h30 from Lisbon, 40min from Porto.

Aveiro is situated on the estuary of Vouga river and is surrounded by a system of marshlands that run 50km parallel to the sea. The town has famous canals where moliceiro boats sail (their colourful painting is also famous), bridges and pastel-coloured houses are somewhat reminiscent of Amsterdam or Venice. Aveiro is actually known as "The Portuguese Venice".

Deserving special mention: Cathedral (15th-18th centuries) and its gothic cross; Misericórdia Church; São Bartolomeu and Senhor das Barrocas chapels; 18th-century churches of Santo António, Nossa Senhora da Apresentação and São Gonçalo; the Regional Museum (housed in the ancient Convento de Jesus); the town hall (website); the train station and its beautiful tiles from the old Fonte Nova factory (1916) now known as the Centro Cultural e de Congressos de Aveiro; the Infante D. Pedro park; the Barra and Costa Nova beaches (the last one is also known for its typical beach houses); Humberto Delgado square; Carcavelos bridge; S. Roque canal.

Contacts and information:

For all questions please contact: DMAT-miniEURO2014@ua.pt

Please visit our website http://minieuro2014.web.ua.pt/ for more information

VIII Summer School
"Achievements and Applications
of Contemporary Informatics,
Mathematics and Physics"
(AACIMP – 2013)



August 1-17, 2013, Kyiv (Ukraine)

http://summerschool.ssa.org.ua

Summer School "Achievements and applications of contemporary informatics, mathematics and physics" (AACIMP-2013) is a unique scientific-educational project, which has been successfully carried out for 8 years by Student Science Association of National Technical University of Ukraine "Kyiv Polytechnic Institute".

Participation in the Summer School is a wonderful opportunity to broaden your horizons, find out more about the latest achievements of science, contemporary high technologies, and topical questions of scientific and technical progress of society.

- **Educational program of AACIMP-2013.** The courses are presented in the form of lectures, seminars, workshops, discussions according to the topics of three areas (streams):
 - **Operational Research** students will get acquainted with advanced researches and breakthroughs in contemporary operational research.
 - **Applied Computer Science** will provide participants with an overview of the actual machine learning and artificial intelligence techniques.
 - **Neuroscience** students of the stream will learn about the latest scientific achievements of distinguished neuroscience specialists.
- Tutors of AACIMP-2013 are the scientists from universities of Germany, USA, UK, France, Italy, Turkey, Japan, Sweden, Ukraine, Russia, Hungary, Czech Republic, Estonia and the leading specialists of the world largest companies. The participants of the Summer School have the possibility to find out today what the rest of the world will know only tomorrow.
- > Social program of AACIMP-2013 involves a wide range of social activities to provide additional opportunities for out-of-school discussions. What is more, participating in the AACIMP social events, you will find out more about Ukrainian traditions, culture and history. Be sure, your staying in Kyiv during AACIMP will be fascinating and grant you unforgettable memories.
- **Registration.** To participate you have to fill in an application form on the AACIMP-2013 website (**summerschool.ssa.org.ua**). The decision on your acceptance will be made by the Organizing Committee within a month from a date of your registration.
 - Early registration until May 1.
 - Late registration until June 1.



VIII Summer School "Achievements and Applications of Contemporary Informatics, Mathematics and Physics"

August 1—17, 2013, Kyiv (Ukraine)

- > Who can apply: Bachelor's, Master's and PhD students, young scientists and professionals under 35.
- > Registration fee includes access to courses of a stream, participation in all social events, coffee breaks, study materials and the Summer School souvenirs. It does not include transfer, accommodation, meals costs and additional expenses.

The type of fee	Participants from KPI	Participants form Ukraine	Participants from abroad	Professionals
Early fee				
(registration before May 1; payment before May 14)	90 EUR	160 EUR	330 EUR	500 EUD
Late fee				500 EUR
(registration before June 1; payment before June 14)	120 EUR	190 EUR	390 EUR	

- > Scholarships and discounts. The participants of Summer School may apply for:
 - AACIMP participation discounts,
 - DAAD scholarships (cover all costs) eligible only for participants studying in Germany.
- **Housing and meals.** Participants may additionally order accommodation and meals on special terms suggested by the organizers (single fee for the whole period of the Summer School).
 - Accommodation fee: international hostel of NTUU "KPI" 160 EUR.
 - Meals fee: only lunch option 70 EUR, 3 meals per day 170 EUR.
- > Contact information



Office 299/15, Student Science Association, National Technical University of Ukraine "Kyiv Polytechnic Institute" Building 1, 37, Peremohy avenue, Kyiv 03056, Ukraine



- +38 044 454 92 43 (tel./fax)
- summerschool@ssa.org.ua (for participants)
- partners@ssa.org.ua (for partners)

You can find all the details of registration, information about courses, terms of participation, discounts and payment on the AACIMP-2013 website:

http://summerschool.ssa.org.ua



Invitation and Call for Papers

IFORS Prize for OR in Development

IFORS is pleased to announce that the Prize will be awarded during the 20thth Triennial conference on "The Art of Modeling" to be held in Barcelona, Spain from 13-18 July 2014.

- Awarded at the close of the IFORS Triennial Conference and carries with it a grand prize of US\$ 4,000.00 and a runner-up prize of US\$ 2,000.00
- The finalist papers are automatically considered for publication in the IFORS Publication, International Transactions in Operational Research (ITOR). Publication is contingent upon the usual refereeing process. Authors of these papers agree that the first right to publish their papers lies with ITOR; as such, they will not publish the same until and unless they receive permission to do so by the ITOR editor.

Important details about the competition follow:

Topic of paper

- The paper describes a practical OR application in a developing country, conducted to assist a specific organization in its decision-making process with regard to education, health, and other basic services, water, technology, resource use (physical or financial), infrastructure, agricultural/industrialization, environmental sustainability with original features in methodology or implementation for development in developing countries. The idea is to optimize the development with the constraints and limited resources.
- The paper includes some description of the application's social context and its impact on the decision making process or on the organization for which it was conducted. Where appropriate, the relevance of the country's state of development to the study is addressed. A stress on developmental issues will be an important factor in the judging. Papers of a purely technical nature, or those, which have no relevance in the developmental context, will not be considered.

Judging Criteria

 Qualifying papers will be evaluated on the following criteria: problem definition, creativity and appropriateness of approach, MS/OR content, stress on developmental issues, innovative methodology, impact of the study, paper organization and structure, participation of local researchers and quality of written and (if selected as finalist) oral presentation.

Other Information

- Principal authors and presenters of any nationality are welcome. If selected to be among the finalists, the entry must be presented by one of the principal authors during the IFORS Triennial Conference to be held in Barcelona, Spain from 13-18 July 2014.
- Finalists' registration fees will be sponsored by IFORS. For finalists who
 are nationals of developing countries, a grant for living expenses may be
 requested but cannot be guaranteed.
- All contributions must be submitted using the submission site http://mc.manuscriptcentral.com/itor, indicating in their cover letters that they are intended for this competition.

Other inquiries should be sent directly to the Prize Chair:

Prof. Andres Weintraub

Professor Department of Industrial Engineering
University of Chile

P.O. Box 2777 Santiago, Chile

E-mail:aweintra@dii.uchile.cl

Last date of submission of the full paper: November 30, 2013

Finalists will be notified by: February 28, 2014.

Date of presentations: July 14, 2014.





Conference Website: http://icota9.conf.tw

The 9th International Conference on Optimization: Techniques and Applications (ICOTA 9) will be held in Taipei, Taiwan, December 12-16, 2013. The conference aims to provide a forum for scientists, researchers, software developers, and practitioners to exchange ideas and approaches, to present research findings and state-of-the-art solutions, to share experiences on potentials and limits, and to open new avenues of research and developments, on all issues and topics related to optimization and its applications. All accepted papers will be published in conference proceedings, and papers with great quality will be invited for publications in special issues of several SCI journals.

Topics of Interest

- inear and nonlinear programming
- · Conic optimization
- Equilibrium problems
- · Global optimization
- · Nonsmooth optimization
- Stochastic programming and dynamic programming
- Multi-objective optimization
- · Heuristic methods
- · Optimal control
- Applications of mathematical modeling and optimization theory and methods in various
- Optimization in management science

Special Issues

- Journal of Global Optimization (SCI)
- Journal of Industrial and Management Optimization (SCI)
- Journal of Chinese Institute of Industrial Engineers (EI,TSSCI)
- Pacific Journal of Optimization (SCI)
- Discrete and continuous Dynamical Systems Series B (SCI)

- Deadline for extended abstract submission: May 31, 2013
- Notification of acceptance: June 30, 2013
- Deadline for camera-ready version submission & early bird registration: September 30, 2013

Keynote Speakers

- · George Nemhauser, Georgia Tech
- · Jong-Shi Pang, University of Illinois

Plenary Speakers

- Xiaoqiang Cai, Chinese University of Hong Kong
- · Toh Kim Chuan, National University of Singapo
- · Masao Fukushima, Kyoto University
- · John Lavery, US Army Research Office
- Juan Enrique Martínez-Legaz, Universitat de Barcelona
- · Ligun Qi Hong Kong Polytechnic University
- · Jie Sun, National Singapore University
- · Kok Lay Teo, Curtin University of Technology . Po-Lung Yu, National Chiao Tung University
- · Ya-xiang Yuan, Chinese Academy of Sciences
- · Xiangsun Zhang, Chinese Academy of Sciences

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Han-Lin Li, National Chiao Tang University

Wataru Takahashi, Tokyo Institute of Technology

Liqun Qi, The Hong Kong Polytechnic Uni

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Local Organizing Committee

Yi-Kuei Lin, National Taiwan University of Science and Technology

Contact: ICOTA2013@gmail.com; ICOTA2013@mail.ntust.edu.tw

TAIWAN TECH