

# 7<sup>th</sup> EUROPT Workshop on Advances in Continuous Optimization

Remagen, Germany, 3-4 July 2009

## Final Report

Traditionally, the EURO working group on continuous optimization – EUROPT – organizes a workshop as a satellite event to the regular EURO conferences. This was the case 2000 in Budapest, 2001 in Rotterdam, 2003 in Istanbul, 2004 in Rhodes, 2006 in Reykjavik, 2007 in Prague, and it was the case this year. On 3-4 July, we organized our 7<sup>th</sup> EUROPT Workshop on Advances in Continuous Optimization in the German city of Remagen. This place was chosen because of its vicinity to Bonn, the venue of the EURO XXIII conference. EUROPT enjoyed the hospitality of the RheinAhrCampus Remagen, a small but successful University of Applied Sciences, and benefited from their excellent facilities.



Opening Ceremony

The workshop was organized by Mirjam Dür and Oliver Stein, with the support of an energetic local team and a devoted Program Committee chaired by Marco A. López Cerdá, the current chair of our working group. We also benefited from the continuing support of Gerhard-Wilhelm Weber, the past-chair of EUROPT. Their support is highly appreciated.

The two-day scientific program comprised two plenary talks, four semiplenary and 84 talks in parallel sessions. The plenaries were given by Yurii Nesterov (on *Fast gradient methods for network flow problems*) and Sven Leyffer (on *Developing nonlinear optimization software*). The four semiplenaries were given by Philippe Toint (*Derivative free optimization and an autocorrecting algorithm*), Leonidas Sakalauskas (*Towards implementable continuous stochastic optimization*), Amir Beck (*Fast gradient-based schemes for total variation minimization*), and Juan Parra (*Lipschitz stability and coderivative analysis in convex semi-infinite optimization*). With this selection, EUROPT has followed its policy to invite not only renowned senior researchers, but also to promote young ambitious scientists and provide to them an opportunity of presenting their work to a large audience.

Several people followed our invitation to organize special sessions about a topic of their choice: Rainer Tichatschke organized a stream of sessions about *Variational Inequalities and Applications*, Immanuel Bomze did the same on *Copositive Programming*, Gabriele Eichfelder organized sessions on *Vector- and Set-Valued Optimization*, and Fabio Schoen about *Global Optimization*. The topics of the contributed talks were also widespread and covered many areas of continuous optimization, like semidefinite, semi-infinite and nonsmooth optimization, stochastic and derivative-free optimization, as

well as applications in various disciplines. Due to the large number of contributions, we had to schedule the contributed talks in five parallel sessions. More detailed information on the program can be found on the Workshop website <http://www.rheinahrcampus.de/europt2009>.

All in all, this amounted to a dense but interesting and high quality scientific program, to which we received enthusiastic feedback from many participants. Some of them even proposed to extend future EUROPT workshops to a three-day meeting with less parallel sessions, such that participants do not have to skip talks due to the tight schedule.

Complementing the scientific program, we had a social program consisting of a welcome evening at the courtyard of the RheinAhrCampus, and a conference dinner during a boat trip on the river Rhine. The magnificent view and the beautiful weather provided for a relaxed atmosphere among the participants and plenty of opportunities for networking. EUROPT considers it important that every participant is enabled to take part in these social events, whence the dinner was covered by the conference fee.



*Impressions of the Conference Dinner during a boat trip on the river Rhine*

Since a couple of years, EUROPT honors a distinguished member who has made extraordinary contributions in and with the working group by making him or her a EUROPT FELLOW. This year, this honor went to Adil Bagirov (University of Ballarat, Australia) for both his scientific work in continuous optimization and his commitment to EUROPT. The award comes with a certificate which was handed out during the conference dinner. Marco López gave a speech describing the achievements of the laureate.



EUROPT Fellow Adil Bagirov (center) with Marco López (right) and Oliver Stein(left)

The organizers would like to thank many people whose contributions have made this workshop the success we believe it has been: First of all, the local organizing team Jürgen Kremer, Claus Neidhardt, Gisela Niedzwetzki and Chantal Ausoni, to whom we are particularly indebted. On behalf of all the participants, we want to thank them for the highly efficient and professional way of dealing with the organization of this event. We are indebted to the board of RheinAhrCampus Remagen for providing an excellent location for this workshop. We also thank our sponsors, most notably EURO (The Association of European Operational Research Societies), GOR (the German Operations Research Society), and the company Schöck Baulösungen. Without their generous support this workshop would not have been possible.

Finally, we thank all speakers for their presentations. We hope they enjoyed the workshop, and we hope they will continue to support the working group in the future.

Next year, the series of EUROPT workshops satellite to the EURO conferences will continue in Portugal: The EURO XXIV conference will take place from 11-14 July 2010 in Lisbon, and the optimization group of the University of Aveiro under responsibility of Domingos Cardoso and Tatiana Tchemisova has agreed to organize the next EUROPT workshop 2010 in Aveiro.

See you next year in Portugal!

Mirjam Dür and Oliver Stein