Mathematical Methods in Economics 2012

Karviná, Czech Republic 11–13, September, 2012 Jaroslav Ramík^{*}, Elena Mielcová^{*}

The 30th international conference on Mathematical Methods in Economics was organized by the Czech Society of Operations Research, and the Czech Econometric Society in cooperation with the Silesian University in Opava, School of Business Administration in Karviná on September 11–13, 2012. This annual conference offered an exposure to the evolution of the several areas that comprise Operational Research, Econometrics, and generally mathematical methods applied in economics to keep participants updated on these continuously evolving dynamic disciplines.

The Conference on Mathematical Methods in Economics is a respected scientific international conference of experts not only from universities, but also from scientific institutions, as well as banks, and business organisations interested in the theory and application of mathematical methods in the field of economics. The conference offered the opportunity to meet the operations research and econometric community in the Czech Republic and also researchers from Slovakia, Poland, and other countries.

The Conference programme covered an opening plenary session, discussions in five streams of sessions, cultural and social programme, and a closing session. The opening lecture was held by Professor Petr Fiala, with his special lecture on "Modelling of competition in revenue management". The competition of doctoral students' papers, organized by the Czech Society of Operations Research, attracted an extraordinary attention. Contributions of students indicated that the new generation of young scientists is prepared, well educated and able to provide relevant research with reasonable results. The first prize winner, Marek Dvořák, presented his paper "Efficient Score Test for Change Detection in Vector Autoregressive Models", the second prize was awarded to Ondřej Krčál for his contribution "An Agent-Based Model of Price Flexing by Chain-Store Retailers", and the third prize was given to Michal Krempl for his paper "Allocation of Trains to Platforms Optimization". All three winners received financial reward from the Czech Society of Operations Research.

Beside the scientific programme which included more than 190 papers, the social programme was also very interesting. A field trip, offered by the organizers, brought participants to an historical part of Vítkovice Steel (part of the city of Ostrava), where production of iron, coal and agglomerates in the so-called Lower Area (Dolní oblast) has already been terminated. Part of this strategic site was proclaimed a National Cultural Monument along with the Hlubina coal mine. Participants visited the original blast furnace, coal mine tower, and the gas storage transformed into a modern concert hall and other interesting sites.

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The Conference Proceedings are available online at the web address: http://mme2012/proceedings/index.php. They are divided into two parts and include 179 papers selected from more than 250 papers submitted to the conference programme committee. All published papers have been subjected to a strict reviewing procedure of two independent referees. A positive feature is that the Proceedings include 33 papers published exclusively by young researchers-mostly doctoral students-and more than 30 papers with young scientists as co-authors. In former years, the Conference Proceedings have been indexed by Web of Science (Thomson Reuters). This year, the Conference Proceedings were submitted to the Web of Science (Thomson Reuters) evaluation process, too.

We hope that all participants found the 30th MME 2012 Conference stimulating, rewarding and pleasant and that they enjoyed the time spent in Karviná. The ensuing 31st international conference on Mathematical Methods in Economics will be organized by the Polytechnic University in Jihlava (Vysoká škola polytechnická Jihlava) in September 2013.

The Nobel Prize for Economics to Alvin E. Roth and Lloyd S. Shapley

Vito Fragnelli*

The announcement arrived to me on 15 October 2012 and sounded as:

The Royal Swedish Academy of Sciences has decided to award The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel for 2012 to **Alvin E. Roth** (Harvard University, Cambridge, MA, USA, and Harvard Business School, Boston, MA, USA) and **Lloyd S. Shap**ley (University of California, Los Angeles, CA, USA) "for the theory of stable allocations and the practice of market design".

Then I looked at the official website of the Nobel Prize (http://www.nobelprize.org) where further information is available, in particular a more detailed motivation:

Stable allocations – from theory to practice. This year's Prize concerns a central economic problem: how to match different agents as well as possible. For example, students have to be matched with schools, and donors of human organs with patients in need of a transplant. How can such matching be accomplished as efficiently as possible? What methods are beneficial to what groups? The prize rewards two scholars who have answered these questions on a journey from abstract theory on stable allocations to practical design of market institutions.

I want just to mention some of the contributions of these Nobel laureates, being conscious that it is not possible to restrict hundreds of papers in few lines. For Lloyd Shapley, I recall the Shapley value and the Shapley-Shubik index, the stochastic games, the market games, the assignment games, the convex games and the potential games. For Alvin Roth, I remember the market games, the results on fixed

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