

**The 22nd International Workshop on Matrices and Statistics (IWMS-2013),
The Fields Institute for Mathematical Research
Toronto, Canada, August 12–15, 2013**

Report by S. Ejaz Ahmed and Simo Puntanen

The purpose of the workshop was to bring together researchers sharing an interest in a variety of aspects of statistics and its applications as well as matrix analysis and its applications to statistics, and offer them a possibility to discuss current developments in these subjects. The workshop aimed to bridge the gap among statisticians, computer scientists and mathematicians in understanding each other's tools.

The International Organizing Committee was chaired by S. Ejaz Ahmed (Canada). The workshop was sponsored by the Fields Institute for Mathematical Research and the SAS Institute.

The keynote speakers were Kai-Tai Fang: "The Magic Square - Historical Review and Recent Development," and Ingram Olkin: "A Linear Algebra Biography" (his talk was read by George P. H. Styan). The invited speakers were Mohamed Amezziane, Oskar Maria Baksalary, Somnath Datta, Susmita Datta, Ali Ghodsi, Karl E. Gustafson, Abdulkadir Hussein, Tõnu Kollo, Shuangge Ma, Steven N. MacEachern, Jianxin Pan, Serge Provost, George P. H. Styan, and Fuzhen Zhang.

Invited special sessions were arranged on the following topics: Applied Probability (organized by Jeffrey J. Hunter); Statistical Inference on GLM (organized by Krishna Saha); Perspectives on High Dimensional Data Analysis (organized by Muni S. Srivastava); Open-Source Statistical Computing (organized by Reijo Sund).

Simo Puntanen organized a *Special Session to Celebrate Lynn Roy LaMotte's 70th Birthday*, with speakers: David A. Harville, Lynn Roy LaMotte, and J. N. K. Rao.



Jianxin Pan and Kai-Tai Fang



Susan Searle and Heather Selvaggio

Jeffrey J. Hunter organized a *Memorial Session and Reception to Honor Shayle R. Searle (1928 – 2013)*, with speakers: David A. Harville, Jeffrey J. Hunter, J. N. K. Rao, Robert Rodriguez, Susan Searle, and Heather Selvaggio. The participants in particular appreciated the wonderful personal reminiscences of Susan Searle and Heather Selvaggio, the two daughters of Shayle R. Searle. The reception at the Fields Institute was supported by the SAS Institute, and Susan Searle and Heather Selvaggio.

The website of the workshop is <http://www.fields.utoronto.ca/programs/scientific/13-14/IWMS/> and the program is available at <http://www.fields.utoronto.ca/programs/scientific/13-14/IWMS/program.html>. A total of about 70 participants attended the conference.

Selected refereed papers presented in the workshop will be published in the *Journal of Statistical Computation and Simulation*.

For previous IWMS-workshops, see <http://www.sis.uta.fi/tilasto/iwms/> from where, for example, "A short history of the International Workshop on Matrices and Statistics" can be downloaded (<http://www.sis.uta.fi/tilasto/iwms/IWMS-history.pdf>).

The 23rd International Workshop on Matrices and Statistics (IWMS-2014) will be held in Ljubljana, Slovenia, June 8–12, 2014 (starting with a cruise on Sunday, June 8, 2014), <http://www.law05.si/iwms/>.



Participants of the IWMS-2013

International Conference on Matrix Analysis and Its Applications - MatTriad 2013 Herceg Novi, Montenegro, September 16–20, 2013

Report by Ljiljana Cvetković

The 2013 edition of MatTriad, fifth in a series of international conferences on Matrix Analysis and Its Applications, was held at the Hunguest Hotel Sun Resort Herceg Novi (Montenegro), from the 16th to the 20th of September 2013. Following the tradition of its predecessors, this meeting gathered researchers around topics in matrix theory and its profound role in theoretical and numerical linear algebra, numerical and functional analysis, and statistics. Invited lectures were presented by Richard A. Brualdi (USA) on alternating sign matrices, Stephen J. Kirkland (Ireland) on the Kemeny constant for a Markov chain, and Paulo C. Rodrigues (Portugal) on the role of matrix analysis in statistical genetics. The last of the invited talks was given by the winner of Young Scientists Award 2011 given at MatTriad 2011 held in Tomar, Portugal. As before, the work of the conference included four lectures in matrix theory, especially dedicated to young participants, given by distinguished experts in the field: Siegfried M. Rump (Germany) on normwise and componentwise structured perturbations of matrices, and Adi Ben-Israel (USA) on the Moore-Penrose inverse and its different applications.

A special issue of CEJM (*Central European Journal of Mathematics*) related to matrix problems will be devoted to the conference, with a significant part based on the best papers of participants.

Apart from the successful scientific work and professional interchange, participants especially enjoyed the beauties of the Hunguest Hotel Sun Resort on the Adriatic coast, in the town of Herceg Novi, at the entrance of Europe's southernmost fjord. At the gala lunch and the closing ceremony of the conference, two young scientists received the 2013 awards: Jaroslav Horáček (Czech Republic) for the talk "On Solvability and Unsolvability of Overdetermined Interval Linear Systems" and Maja Nedović (Serbia) for the talk "Generalizations of Diagonal Dominance and Applications to Max-norm Bounds of the Inverse." They are invited to present talks at the 6th MatTriad conference to be held in 2015 in Coimbra, Portugal.

The conference was co-organized by the Faculty of Science, Department of Mathematics and Informatics, Novi Sad and the Faculty of Mathematics and Computer Science of Adam Mickiewicz University, Poznań. The conference scientific committee consisted of Tomasz Szulc (Poland) - Chair, Natália Bebiano (Portugal), Ljiljana Cvetković (Serbia), Heike Faßbender (Germany) and Simo Puntanen (Finland), and its organising committee was Ljiljana Cvetković (Serbia) - Chair, Francisco Carvalho (Portugal), Ksenija Doroslovački (Serbia), and Vladimir Kostić (Serbia).

More details about the program, the book of abstracts, and the presentations can be found at:
<http://mattriad2013.pmf.uns.ac.rs>.



Participants of the MatTriad 2013 conference