PREFACE

SPECIAL VOLUME OF THE ELECTRONIC JOURNAL OF LINEAR ALGEBRA

On the occasion of

Directions in Matrix Theory Conference
University of Coimbra, Portugal, July 9-10, 2011

Special editors: Carlos M. da Fonseca, Shmuel Friedland, and Oskar Maria Baksalary

The Directions in Matrix Theory Conference was held at the Department of Mathematics of the University of Coimbra, Portugal, on July 9-10, 2011. The workshop aimed to be a forum of discussion of frontline areas of Matrix theory and its applications, bringing together renowned researchers and worldwide recognized experts of diverse fields fostering the exchange of experiences and insights from different perspectives.

The scientific committee consisted of Shmuel Friedland (University of Illinois at Chicago, USA), Steve Kirkland (National University of Ireland Maynooth, Ireland), Natália Bebiano (University of Coimbra, Portugal), and Carlos Fonseca (University of Coimbra, Portugal; chair).

This intense weekend meeting attracted more than 80 researchers from all continents, namely: Belgium, Brazil, Canada, France, Germany, Greece, India, Iran, Ireland, Italy, Morocco, The Netherlands, Portugal, Serbia, Slovenia, Spain, United Kingdom, and USA.

The 8 plenary lectures were Béla Bollobás (University of Cambridge, UK), Shmuel Friedland, Willem H. Haemers (Tilburg University, The Netherlands), Natália Bebiano, Steve Kirkland, Juan Manuel Peña (Universidad de Zaragoza, Spain), Volker Mehrmann (Technische Universität Berlin, Germany), and Thomas J. Laffey (University College Dublin, Ireland).

The local organizing committee consisted of Ana Nata (Polytechnic Institute of Tomar, Portugal) and Rute Andrade, the secretary of the Centre for Mathematics, University of Coimbra.

The meeting was endorsed by the International Linear Algebra Society–ILAS. It was also sponsored by the Centre for Mathematics, University of Coimbra–CMUC and the Department of Mathematics, University of Coimbra–DMUC.

This special volume of The Electronic Journal of Linear Algebra is devoted to the 36 talks as well as the invited lectures presented at the conference.
Each paper went through the usual procedure of refereeing, according to the high standards of ELA.

More details of the titles, abstracts, participants’ testimonials and some photos can be seen at


This conference was preceded by the Topics in Tensors - A Summer School by Shmuel Friedland. Details are given in

http://www.mat.uc.pt/~cmf/SummerSchool/TopicsInTensors.htm