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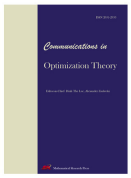

EDITORIAL
A SPECIAL ISSUE ON MATRIX THEORY AND RELATED TOPICS DEDICATED TO PROFESSOR AVI BERMAN ON THE OCCASION OF HIS 80TH BIRTHDAY

Professor Avi (Abraham) Berman is an Israeli researcher working in the areas of Matrices, Graphs and the connections between the two where he obtained a number of significant results. Avi was born in Haifa in 1943. He received his B.Sc. (1966) and M.Sc. (1968) in mathematics from the Technion. In 1970 he received his Ph.D. in applied mathematics from Northwestern University. After 2 years in Montreal, Canada, he returned to Israel. The Department of Mathematics at the Technion became his professional home, from the beginning as a Senior Lecturer in 1972 until his retirement in 2011 as a Professor and holder of the Israel Pollack Academic Chair, and continuing now as Professor Emeritus. Since 1995 he also held a parallel position of a Professor in the Department of Education in Sciences and Technology at the Technion. In the years 1990–1997 he served as head of the Center of Pre–University Studies, and in the years 2007–2010 as head of the Department of Education in Sciences and Technology, both at the Technion. Between 2007 and 2010 he was also Head of the Israeli Society for Promotion of and Research on Creativity and Giftedness.

Avi was a frequent visitor to the Hamilton Institute at the National University of Ireland, Maynooth, where he serves as one of the scientific advisors of the institute. Avi was co-organizer of 16 Haifa Matrix Theory conferences - the first one in 1984, and the sixteenth one in 2012. He also co-organized several Hamilton Workshops on Nonnegative Matrices and Related Topics.

Avi Berman published around 120 refereed journal and conference articles, 9 books and edited 5. His list of publications includes papers on linear inequalities over cones, stability, proper splitings, completely positive matrices, transmission control protocol (TCP), sign patterns, minimum rank, and graph spectra (the Colin de Verdière parameter). Avi supervised 24 Ph.D. Students, 20 M.Sc. students and 12 postdoctoral students.

In this special issue we present eight papers authored by a selected group of experts in the areas of Matrices and Graphs. Most of the papers collected here have been contributed by former students, collaborators, friends and colleagues of Avi Berman, who were influenced by his scientific work. These papers cover a wide spectrum of important problems and topics

of current research interest. Therefore we feel that this special issue will be highly important for many researchers, who are interested in recent developments in the areas of Matrices and Graphs as well as in its numerous applications.

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