

EDITORIAL

A SPECIAL ISSUE ON CONTROL AND OPTIMIZATION DEDICATED TO PROFESSOR RICHARD VINTER ON THE OCCASION OF HIS 75TH BIRTHDAY

Richard Vinter is an outstanding British mathematician who made significant contributions to Control, Optimization, Nonsmooth and Variational Analysis, and various applications to problems of science and technology. Currently he is Professor Emeritus (Control Theory) and Senior Teaching Fellow at the Imperial College, London, UK.

Professor Vinter received a BSc from Oxford University (Engineering Science), a PhD from Cambridge University (Electrical Engineering) and a DSc also from Cambridge University (Mathematics). He spent two years at the Electronic Systems Lab., M.I.T. (Harkness Fellowship). Since 1974, he has had academic posts at the Imperial College and became Professor (Control Theory) in the EEE Department in 1991. Richard Vinter is a former Dean/Consul of the Faculty of Engineering and a former Head of the Control and Power Research Group. He has been Director or co-Director of several research projects, including a joint EPSRC Programme Grant with Cambridge University, the Data and Information Fusion DTC and EU networks. He served on the EPSRC advisory panel (Engineering) and was a panelist for the 2014 Research Evaluation Framework (REF). Professor Vinter has had visiting positions at overseas universities and research center, including MIT, Univ. Toronto, Univ. British Columbia, Univ. Paris VI and IX, Mathematics Research Centre at Montreal, Polish Academy of Sciences and Trieste Inst. of Advanced Study. He has published over 150 scientific papers, three textbooks, a 2000 monograph on Optimal Control, and the most recent monograph on Principles of Dynamic Optimization (2024). His fundamental results on optimality condition in nonsmooth optimal control and differential inclusions have been highly recognized by the control and optimization communities.

This special issue contains papers authored by a selected group of researchers in the areas of Optimization and Control. Most of the papers collected here have been contributed by collaborators, friends, and colleagues of Richard Vinter, who were influenced by his scientific work. The special issue contains nine papers contributed by well-recognized researchers from Brazil, France, Great Britain, Israel, Italy, Mexico, and USA.

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 mathematicians and applied scientists who are interested in recent developments in Optimization and Control as well as in its numerous applications.

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