

## Preface

This special issue of the *Journal of Convex Analysis* is dedicated to Professor Antonino Maugeri on the occasion of his 70th birthday. In 2015, during the 63rd Workshop on “Variational Analysis and Applications”, held at Erice at the Ettore Majorana Foundation and Centre for Scientific Culture, co-directed by Patrizia Daniele, C. De Lellis, A. Maugeri, R. T. Rockafellar, and M. Théra, a two-day session has been dedicated to Antonino Maugeri. The papers in this special issue are worked-out contributions to this session. They present recent results in Optimal Control, Differential Inclusions, Obstacle Problems, Second Order Optimality Conditions, Boundary Value Problems, Stochastic Optimization, Minimax Problems, Variational and Quasi-Variational Inequalities.

Professor Maugeri’s research activity started with studying boundary value problems for partial differential equations with Francesco Guglielmino, who was a student of Carlo Miranda. Then, he established a strong collaboration with Sergio Campanato and had numerous friends and collaborators in Catania, Messina, Reggio Calabria and abroad. Simultaneously, he attended lectures from Guido Stampacchia and started studying variational inequalities. In 2000 he published a book entitled “*Elliptic and parabolic equations with discontinuous coefficients*”, together with Dian Palagachev and Lubomira Softova.

The collaboration with Franco Giannessi in the domain of variational and quasi-variational inequalities started in 1979 and became fundamental for his interest in variational and quasi-variational inequalities. This led him to become interested in equilibrium problems on networks, such as traffic, economic, financial and cybersecurity problems. He studied problems arising from generalized complementarity laws and found, together with his col-

laborators, new methodologies for solving problems connected with strong infinite-dimensional duality and Lagrange multipliers. Also in this field, he had and still has many collaborators in Catania, Messina, Reggio Calabria, just to mention a few Italian places.

It is worth mentioning the fact that Antonino has mentored more than 20 researchers, has co-authored around 100 journal articles, is co-editor of five volumes, is associate editor of the *Journal of Global Optimization* and of the *Journal of Optimization Theory and its Applications*, was a member of the editorial board of *Set-Valued and Variational Analysis: Theory and Applications*, and of the *Bollettino dell'Unione Matematica Italiana* (BUMI). In 1997, during the *Eighth International Colloquium on Differential Equations*, Plovdiv (Bulgaria), he received the prize *International Colloquia on Differential Equations*.

We would like to thank Prof. Lionel Thibault for giving us the opportunity to produce this special issue for the *Journal of Convex Analysis*, dedicated to Prof. Antonino Maugeri.

We would like to thank all the authors and all the many referees for their reports to make this special issue a reality. It is our great honor to be able to join the authors in dedicating this volume to Professor Antonino Maugeri on the occasion of his 70th birthday and we wish him good health and a long list of further success in the years ahead.

Patrizia Daniele, Franco Giannessi, and Michel Théra

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