

INTERNATIONAL WORKSHOP AT MESSINA

The first International Workshop

Variational, Topological and Set-Valued Methods for Nonlinear Differential Problems

was held during April 14–16 2010, at the Engineering Faculty of the University of Messina.

In the last years, the development of these techniques for the study of ordinary or partial differential equations has played a fundamental role in various fields of pure and applied research, as physics, mechanics, engineering, neural networks, economy, and a lot of others.

The conference included ten plenary lectures and about forty talks by several of the main Italian and foreign experts and by young mathematicians, providing an excellent opportunity to overview the present status and perspectives of some of the most meaningful research directions.

Among foreign speakers, there were Jean Mawhin (Universit Catholique de Louvain, Belgium), Dumitru Motreanu (Universit de Perpignan, France), Nikolaos S. Papegeorgiou (National Technical University of Athens, Greece) and Vicentiu Radulescu (Mathematical Institute of the Romanian Academy, Romania).

This volume collects nine contributions coming from plenary conferences. Each manuscript has been subjected to a careful refereeing procedure.

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Universities of Reggio Calabria, Messina, and Catania significantly contributed in various ways.

We are grateful to all participants, sponsors, and young colleagues that – with a great spirit of collaboration – helped us to organize the workshop and overcome many logistic difficulties.

Catania, February 2011

Gabriele Bonanno (Messina)

Salvatore A. Marano (Catania)