

International Workshop:

Variational Analysis and Equilibrium Models in Physical and Socio-Economic Phenomena

P.le Vincenzo Tecchio, 80 Naples Aula Scipione Bobbio June 19th-21st, 2017

The aim of the Workshop is to review and discuss recent developments of the theory of Variational Analysis and to provide a forum for fruitful interactions in closely related fields of research and its applications.

Variational Analysis can be considered as an increasing expression of the optimization theory and the variational and quasi-variational inequality theory is ant its fundamental part also for the very important role in application. Variational inequalities proved to be a very useful and powerful tool for investigation and solution of many equilibrium type problems in economics, engineering, operations research and mathematical physics. In fact, variational inequalities for example provide a unifying framework for the study of such diverse problems as boundary value problems, price equilibrium problems and traffic network equilibrium problems. Besides, they are closely related with many general problems of nonlinear analysis, such as fixed point, optimization and complementary problems. As a result, the theory and solution methods for variational inequalities have been studied extensively, and considerable advances have been made in these areas. The multidisciplinary aspect of the variational analysis promotes further research in this field and in the utilization of the theory to solving numerous engineering and economic problems.

Particular emphasis will be placed on novel ideas and promising research developments.

Specific topics of interest are (but not limited to)

- Nonlinear Optimization
- Stochastic Optimization
- Variational Inequalities
- Differential Variational Inequalities
- Optimization for Finance
- Optimal Transportation Theory
- Convex, Nonsmooth and Energy Optimization
- Optimization and Dynamical Systems
- Equilibrium Problems

Directors of the workshop

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Registration: Persons wishing to attend the Workshop should apply before May 30th, 2017. Application and additional information about the Workshop can be found at the following address: http://www.dma.unina.it/vaempsep 2017



Dipartimento di Matematica e Applicazioni "R. Caccioppoli"



GNAMPA - Gruppo Nazionale per l'Analisi Matematica, la Probabilità e le loro Applicazioni



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