

International Centre for Scientific Culture

"E. Majorana"

International School of Mathematics

DRAFT

"G. Stampacchia"

38th Workshop:

VARIATIONAL ANALYSIS AND APPLICATIONS

ERICE, Sicily: June 20 – July 1, 2003

In honour of G. Stampacchia in the 25th anniversary of his death and of J.-L. Lions

Purpose of the workshop

The workshop aims to present the status-of-the art and the research directions of Variational Analysis and its applications. Variational Analysis encompasses a large area of modern mathematics, like the classic Calculus of Variations, the theories of perturbation, approximation, subgradient, subderivates, set convergence and Variational Inequalities. Originated by the Signorini-problem about 4 decades ago, Variational Inequalities have had a great development and influence both in the progress of Variational Analysis, and in offering the mathematical model to several fundamental problems of Mathematical Physics and, more recently, of Engineering, Statistics, Networks, Economics.

Applications

Persons wishing to attend the workshop should apply in writing to:

Franco Giannessi
Dept. of Mathematics, Univ. of Pisa
Via F. Buonarroti, 2
56127 Pisa, Italy
Tel. +39-050-2213233
Fax +39-050-2213224
e-mail GIANNESS@DM.UNIPI.IT

specifying:

- i) date and place of birth, together with present nationality;
- ii) affiliation;
- iii) address, e-mail address.

F. GIANNESSI-A. MAUGERI
Directors of the Workshop

A. ZICHICHI
Director of the Centre

Lecturers

J. ABADIE, University "P. et M. Curie", Paris, F
A. AMBROSETTI, International School For Advanced Studies, Trieste, I
L. AMBROSIO, Scuola Normale Superiore, Pisa, I
G. ANICHINI, University of Florence, Florence, I
H. ATTOUCH, University of Montpellier II, Montpellier, F
J.-P. AUBIN, University Paris Dauphine, Paris, F
A. AUSLENDER, University "Claude Bernard-Lyon I", Lyon, F
C. BAIOCCHI, University "La Sapienza", Rome, I
H. BEIRAO da VEIGA, University of Pisa, Pisa, I
A. BENSOUSSAN, Centre National Etudes Spatiales, F
V. BOLTYANSKI, CIMAT, Guanajuato, MEXICO
G. BUTTAZZO, University of Pisa, Pisa, I
L. CAFFARELLI, University of Texas, Austin, TX, USA
A. CELLINA, University of Milan-Bicocca, Milano, I
G.-Y. CHEN, Chinese Academy of Sciences, Beijing, CN
F.-H. CLARKE, University "Claude Bernard-Lyon I", Lyon, F
P. COLLI, University of Pavia, Pavia, I
A. CONTE, University of Turin, Turin, I
R. CONTI, University of Florence, Florence, I
R.W. COTTLE, Stanford University, Stanford, California, USA
P. DANIELE, University of Catania, Catania, I
G. DA PRATO, Scuola Normale Superiore, Pisa, I
V. F. DEM'YANOV, St. Petersburg University, St. Petersburg, RU
G. Di PILLO, University "La Sapienza", Rome, I
I. EKELAND, University Paris Dauphine, Paris, F
P. FERRARI, University of Pisa, Pisa, I
M. FRASCA, University of Catania, Catania, I
M. G. GARRONI, University "La Sapienza", Rome, I
P. GERMAIN, Académie des Sciences, Paris, F
M. GIAQUINTA, Scuola Normale Superiore, Pisa, I
S. GIUFFRÉ, University of Reggio Calabria, Reggio Calabria, I
J. GWINNER, University Federal Army, Neubiberg, D
J.-B. HIRIART-URRUTY, University Paul Sabatier, Toulouse, F
G. IDONE, University of Reggio Calabria, Reggio Calabria, I
A. IOFFE, Technion, Haifa, IL
D. KINDERLEHRER, Carnegie Mellon University, Pittsburgh, PA, USA
G. LEITMANN, University of California, Berkeley, CA, USA
G. M. LIEBERMAN, Iowa State University, Ames, IA, USA
E. MAGENES, University of Pavia, Pavia, I
G. MAIER, Technical University of Milan, Milan, I
O. G. MANCINO, University of Pisa, Pisa, I
S. A. MARANO, University of Reggio Calabria, Reggio Calabria, I
P. MARCOTTE, University of Montréal, Montréal, CDN
A. MARINO, University of Pisa, Pisa, I
M. MARINO, University of Catania, Catania, I
S. MAZZONE, University "La Sapienza", Rome, I
A. MIELE, Rice University, Houston, TX, USA
L. MODICA, University of Pisa, Pisa, I

B. MORDUKHOVICH, Wayne State University, Detroit, MI, USA
V. M. K. MURTHY, University of Pisa, Pisa, I
A. NAGURNEY, University of Massachusetts, Amherst, MA, USA
F. NICOLOSI, Univ. of Catania, Catania, I
L. NIRENBERG, New York University, New York, USA
D. K. PALAGACHEV, University of Bari, Bari, I
D. PALLASCHKE, University of Karlsruhe, Karlsruhe, D
M. PAPPALARDO, University of Pisa, Pisa, I
P. M. PARDALOS, University of Florida, Gainesville, FL, USA
J.-P. PENOT, University of Pau, Pau, F
G. PULVIRENTI, University of Catania, Catania, I
L. Q. QI, Hong Kong Polytechnic University, Kowloon, HK, CN
T. RAPCSÁK, Hungarian Academy of Sciences, Budapest, HU
B. RICCERI, University of Catania, Catania, I
S. M. ROBINSON, University of Wisconsin, Madison, WI, USA
R. T. ROCKAFELLAR, Washington University, Seattle, WA, USA
A. RUBINOV, University of Ballarat, Ballarat, AUS
G. SACHS, University of München, München, D
C. SBORDONE, University of Naples "Federico II", Naples, I
J. SERRIN, University of Minnesota, Minneapolis, MN, USA
S. SIMONS, University of California, Santa Barbara, CA, USA
G. TALENTI, University of Florence, Florence, I
R. TEMAM, University of Paris-Sud, Paris, F
M. THÉRA, University of Limoges, Limoges, F
C. VITANZA, University of Messina, Messina, I
R. J.-B. WETS, University of California, Davis, CA, USA
X. Q. YANG, Hong Kong Polytechnic University, Kowloon, HK, CN

Topics

Direct methods in Calculus of Variations
Dynamical Systems
Elastic-Plastic Structures
Equilibrium problems on networks
Exact penalization
Existence, regularity of weak solutions
Lagrangian theory, separation, duality
Minimax problems
Mixed type equations
Multifunctions, differentiable inclusions
Numerical simulation
Optimal Control, nonconvex optimization
Quasidifferential calculus
Sensitivity and Stability problems
Set convergence
Stochastic variational analysis
Subgradients
Unilateral and obstacle problem
Variational geometry
Variational problems and higher order derivatives
Vector variational inequalities