

*International Centre for Scientific Culture “E. Majorana”
School of Mathematics “G. Stampacchia”*

“77TH VARIATIONAL ANALYSIS AND APPLICATIONS”

PROGRAM OF LECTURES AND SHORT COMMUNICATIONS

September 1st– September 7, 2024

Last Update: August 28, 2024

MONDAY September 2, S. DOMENICO ROOM

9.15 – 9.30 **Welcome addresses**

Chair: *Franco Tomarelli*

9.30 – 9.45 **Gold Medal “Guido Stampacchia” Ceremony**

9.45 – 10.30 ***Maria COLOMBO* (EPFL, Lausanne)
“Flexibility of Two-Dimensional Euler Flows”**

10.30 – 11.00 **Coffee Break**

11.00 – 11.45 ***Gianni DAL MASO* (SISSA)
“Homogenisation of free discontinuity problems: the vectorial case”**

11.45 – 12.30 ***Claudia Alejandra SAGÀSTIZABAL* (University of Campinas)
“Weak convexity and approximate subdifferentials”**

13.00 **Lunch**

Chair: *Gianni Dal Maso*

15.00 – 15.45 ***Caroline GEIERSBACH* (WIAS, Berlin)
“Probabilistic state constraints for optimal control problems under
uncertainty”**

15.45 – 16.30 ***Russell LUKE* (Universitat Goettingen) “Superlinearly convergent
bundle-type methods for optimization with 0-dimensional partial
smoothness”**

16.30 – 17.00 **Coffee Break**

17.00 – 17.45 ***Antonio LEACI* (Università del Salento),
“Symmetrised Fractional Variation with L^1 fidelity for signal and image denoising**

TUESDAY September 3, S. DOMENICO ROOM

Chair: *Marianne Akian*

- 9.00 – 9.45 *Helène FRANKOWSKA (IMJ, Sorbonne Université, Paris)*
 “Nonsmooth Analysis in Wasserstein Spaces and some Applications”
- 9.45 – 10.30 *Hasnaa ZIDANI (INSA Rouen)*
 “Hamilton-Jacobi approach for some optimal control problems in $\text{Cat}(0)$ spaces”
- 10.30 – 11.00 Coffee Break
- 11.00 – 11.45 *Martin KRŮŽÍK (Czech Academy of Sciences, Praha)*
 “Non-interpenetration of matter in lower-dimensional structures”
- 11.45 – 12.30 *Serena MORIGI (Università di Bologna)* “Nonlinear compressed sensing
with applications to ill-posed inverse problems”
- 13.00 Lunch

Chair: *Helène Frankowska*

- 15.00 – 15.45 *William McENEANEY (Univ. California, San Diego)*
 “Staticization-Based Numerical Approach to the Schrödinger Equation”
- 15.45 – 16.30 *Matteo NOVAGA (Università di Pisa)*
 “Periodic partitions with minimal perimeter”
- 16.30 – 17.00 Coffee Break
- 17.00 – 17.25 *Edoardo MAININI (Università di Genova)*
 “Linearization of finite elasticity with surface tension”
- 17.25 – 17.50 *Daniel WALTER (Humboldt-Universität)*
 “On the extremal points associated to some vectorial total variation seminorms”
- 17.50 – 18.15 *Alberto RONCORONI (Politecnico di Milano)*
 “Stable minimal hypersurfaces in \mathbb{R}^4 ”

WEDNESDAY September 4,

08.00 *Social trip to ...*

THURSDAY September 5, S. DOMENICO ROOM

Chair: *Michael Hintermüller*

**9.00 – 9.45 *Adriana GARRONI* (Università La Sapienza, Roma)
“Asymptotics of a discrete model for partial defects”**

**9.45 – 10.30 *Aris DANILIDIS* (TU, Wien)
“Everywhere differentiable Lipschitz continuous functions can be highly pathological”**

10.30 – 11.00 Coffee Break

**11.00 – 11.45 *Giovanni COLOMBO* (Università degli Studi, Padova)
“Recent advances on the optimal control of Moreau’s sweeping process”**

**11.45 – 12.30 *Mikhail SOLODOV* (IMPA, Rio de Janeiro)
“Descent sequences in weakly convex optimization”**

13.00 Lunch

Chair: *Antonin Chambolle*

**15.00 – 15.45 *Teemu PENNANEN* (King’s College, London)
“Convex stochastic optimization”**

**15.45 – 16.30 *Ludovic RIFFORD* (Université Cote d’Azur, Nice)
“On the minimizing Sard Conjecture in sub-Riemannian geometry”**

16.30 – 17.00 Coffee Break

**17.00 – 17.25 *Marco CAROCCIA* (Politecnico di Milano)
“On the singular planar Plateau problem”**

**17.25 – 17.50 *Andrea NATALE* (INRIA & LPP, Université de Lille)
“Metric extrapolation in the Wasserstein space”**

**17.50 – 18.15 *Antonella NASTASI* (Università di Palermo)
“Variational methods for double phase functionals”**

20.00 Social dinner

FRIDAY September 6, S. DOMENICO ROOM

Chair: *Giuseppe Buttazzo*

- 9.00 – 9.45** ***Sylvain Sorin* (IMJ-PRG, Sorbonne Université, Paris)**
 “Asymptotic value of repeated games: a variational approach”
- 9.45 – 10.30** ***Antonin Chambolle* (CERAMADE, Dauphine / PSL university, Paris)**
 “Discrete to continuous crystalline curvature flows”
- 10.30** **Closing addresses**
- 13.00 Lunch**