

# Shape Optimization, Geometric Inequalities and Related Topics

## Program

### MONDAY, JANUARY 30

09:30 Registration

10:00 Opening

10:15 Two variational problems coming from thermal insulation (Domenico Angelo La Manna).

11:00 Coffee Break

11:30 Sharp stability of higher order Dirichlet eigenvalues (Mickaël Nahon)

12:15 Some new bounds for a mean-to-max problem involving the torsion function (Luca Briani)

13:00 Lunch

14:30 Rigidity results for the Robin  $p$ -Laplacian (Alba Lia Masiello)

15:15 Comparison results for a nonlocal singular elliptic problem (Ida de Bonis)

16:00 Break

16:30 Rearrangement of Gradient (Andrea Gentile)

17:15 Debonding models: the wave equation on time-dependent domains and related coupled problems (Riccardo Molinarolo)

### TUESDAY, JANUARY 31

09:30 Optimal bounds for Neumann eigenvalues in terms of the diameter (Marco Michetti)

10:15 Stability in shape optimization under convexity constraint (Raphaël Prunier)

11:00 Coffee Break

11:30 Numerical optimization of domain on the sphere (Eloi Martinet)

12:15 About maximal distance minimizers (Yana Teplitskaya)

13:00 Lunch

14:30 Existence and multiplicity results for some classes of nonlinear differential problems (Angela Sciammetta)

15:15 On the critical  $p$ -Laplace equation (Alberto Roncoroni)

16:00 Break

16:30 Non-local BV functions and a denoising model with  $L^1$  fidelity (Giorgio Stefani)

17:15 Capacities, outward minimizing sets and curvature flows (Mattia Fogagnolo)

18:00 Closing



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