## Analysis, Control and Inverse Problems for PDEs, Napoli 26-30 novembre 2018 PROGRAM

	Monday, November 26
8:15-9:00	Registration (in Rectorate)
9:00-9:40	Opening (in Rectorate)
9:40-10:20	JM. Coron (in Rectorate) - From the water clocks to the regulation of rivers
10:20-11:00	Transfer to the Accademia
11:00-11:30	Coffee break
11:30-12:10	E. Trélat - Positive minimal time for the control of state constrained dynamical systems
12:10-12:50	Y. Privat - Optimal control of resources for species survival
12:50-13:30	U. Boscain - The self-adjointness of the Laplacian and the underlying geometry
13:30-15:00	Lunch in Accademia
15:00-15:25	A) D. Barilari - On the regularity of abnormal minimizers for rank 2 sub-Riemannian Structures
	B) F. Bucci - On Riccati equations arising in the optimal boundary control of certain PDE systems with predominant or full hyperbolic character
15:25-15:50	A) T. Scarinci - Some results about stability analysis, regularizations and applications
	B) C. Clason - Bouligand-Landweber iteration for a non-smooth ill-posed problem
15:50-16:05	A) T. Sproll - Numerical Identification of Motor Units in Muscles
	B) C. Zhang - Internal rapid stabilization by a scalar feedback for the 1-D linear transport equation
16:05-16:35	Coffee break
16:35-17:15	F. Rossi - Controllability and minimal time for control of the transport equation
17:15-17:55	A. Schiela - An affine covariant composite step method for equality constrained optimization in function space

	Tuesday, November 27
9:00-9:40	B. Perthame - Tumor growth: from compressible models to free boundary problems
9:40-10:20	P. Marcati - QHD: when fluid dynamics meets with quantum mechanics
10:20-11:00	O. Glass - One-side boundary controllability of the p-system
11:00-11:30	Coffee break
11:30-11:55	A) A. Marigonda - A Bolza problem in Wasserstein space
	B) F. M. Hante - Hybrid System Theory for Gas Network Operation
11:55-12:20	A) M. Palladino - On a Model for the Growth of Tree Stems and Vines
	B) G. Olive - Observability inequalities with compact remainder
12:20-12:35	A) C. Urbani - Bilinear control of parabolic evolution equations
	B) A. Hayat - Stabilization of 1D nonlinear hyperbolic equations in fluid mechanics
12:35-12:50	A) C. Pouchol - Phase portrait control for 1D monostable and bistable reaction- diffusion Equations
	B) M. T. Chiri - Conservation laws for a network of supply chains with discontinuous speed and finit buffer
12:50-13:30	B. Jacob - On continuity of solutions for parabolic control systems and input-to- state stability
13:30-14:45	Lunch in Accademia
14:45-15:25	F. Ancona - Exponential Stability of Large BV Solutions in a Model of Granular flow
15:25-16:05	P. Goatin - Traffic control by autonomous vehicles
16:05-16:35	Coffee break
16:35-17:15	A. Cesaroni - On the optimization of conservation laws at a junction
17:15-17:55	G. M. Coclite - Nonlinear Peridynamic Models

	Wednesday, November 28
9:00-9:40	F. Alabau-Boussouira - Control and indirect stabilization, examples and applications
9:40-10:20	E. Zuazua - Control of some models in population dynamics
10:20-11:00	K. Beauchard - Null controllability of hypoelliptic equations on the whole space
11:00-11:30	Coffee break
11:30-12:10	A. Porretta - The turnpike property in mean field games
12:10-12:50	H. Frankowska - Invariance of Sets under Semilinear Systems
12:50-13:30	K. A. Morris - Optimal Actuator Location in Semi-linear PDEs
13:30-14:30	Lunch in Accademia
15:00-19:00	Social visits
13.00-19.00	
20:00-22:00	Social dinner

	Thursday, November 29
9:00-9:40	G. Buttazzo - Optimal reinforcing networks for elastic structures
9:40-10:20	D. Bucur - Maximization of Neumann eigenvalues
10:20-11:00	C. Trombetti - Isoperimetric inequalities for Steklov-Laplacian eigenvalues
11:00-11:30	Coffee break
11:30-11:55	A) P. Baldi - Control of water waves and quasilinear evolution PDEs
	B) P. Martinez - The cost of controlling parabolic equations with inverse square potential or degeneracy inside
11:55-12:20	A) F. Leonetti - Maximum principles for some elliptic systems
	B) M. Morancey - A block moments method: dealing with spectral condensation in the minimal null control time problem for parabolic systems with scalar control
12:20-12:45	A) F. Iurlano - Concentration analysis of brittle damage
	B) P. Lissy - Internal controls for a problem with fractional Laplacian using finite-difference method
12:45-13:00	A) V. Basco - Necessary conditions for infinite horizon optimal control problems under state constraints and Hamilton-Jacobi-Bellman equations
	B) M. Marschall - Bayesian inversion with adaptive low-rank approximation
13:00-13:15	A) C. Mendico - Long time behavior of first order mean field games on euclidean space
	B) H. Takase - Inverse Source Problem related to the Gravitational Waves in General Relativity
13:15-14:45	Lunch in Accademia
14:45-15:25	N. Fusco - Asymptotic stability of the gradient flow of nonlocal energies
15:25-16:05	P. Baroni - Some regularity results on double phase variational integrals
16:05-16:35	Coffee break
16:35-17:15	R. Ignat - A De Giorgi type conjecture for minimal solutions to a nonlinear Stokes Equation
17:15-17:55	A. Pratelli - Some existence results for the isoperimetric problem with double density

	Friday, November 30
9:00-9:40	S. Bertoluzza - Natural norm stabilization of unstable numerical methods
9:40-10:20	S. Ervedoza - Minimal time issues for the observability of Grushin like equations
10:20-11:00	G. Russo - Gaussian Wave Packet Transform methods for the semiclassical Schrödinger equation with random inputs
11:00-11:30	Coffee break
11:30-11:55	A) B. Brandolini - A sharp estimate for Neumann eigenvalues of the Laplace-Beltrami operator for domains in a hemisphere
	B) G. Fragnelli - A degenerate population equation: Carleman estimates and null controllability
11:55-12:20	A) M. Cristofol - Simultaneous determination of the drift and diffusion coefficients in stochastic differential equations
	B) F. Marbach - Quadratic Controllability
12:20-12:35	A) D. A. La Manna - An Isoperimetric Problem with a Nonlocal Term
	B) M. Strazzullo - Reduced Order Methods for Optimal Flow Control Problem with Application in Environmental Marine Sciences and Engineering
12:35-13:15	T. Takeuchi - A mathematical model for elastic-plastic composites and homogenization
13:15-14:30	Lunch in Accademia
14:30-15:10	H. Egger - Estimation of flow geometry and wall shear stress from magnetic resonance measurements
15:10-15:50	F. Triki - Identification of an algebraic domain from a finite number of its generalized polarization tensors
15:50-16:30	M. Yamamoto - Inverse problems by Carleman estimates for complex fluid dynamics