

Unione
Matematica
Italiana



Università
degli Studi di
Messina

Program of Special Sessions

2nd Joint Meeting Brazil-Italy in Mathematics

September 7-11, 2026
Messina



Special Session SS1 - “Sharp Energy Decay and Stabilization in Dissipative Evolution Equations: From Waves to Fluids”

Building: Economia, 3rd floor

Room: Aula 8

Monday, 7 September	
14:30 – 14:50	Juan Bautista Limaco Ferrel <i>Insensitizing controls with $N-1$ components for the N-dimensional Ladyzhenskaya–Smagorinsky system</i>
14:50 – 15:10	Florinda Capone <i>Viscoelastic Effects on Thermal Convection in Jeffreys Fluids</i>
15:10 – 15:30	Marcelo Moreira Cavalcanti <i>Critical wave equation with nonlinear $E(t)u_t$ damping</i>
15:30 – 15:50	Ivana Bochicchio <i>Recent results on thermo-elasticity for beams</i>
Thursday, 10 September	
14:30 – 14:50	José R. Fernandez García <i>A porous thermoelastic problem with microtemperatures and fading memory</i>
14:50 – 15:10	Genni Fragnelli <i>A mixed peridynamic theory for beams</i>
15:10 – 15:30	Maria Astudillo <i>On the Stability of Coupled Wave Equations with Local Kelvin-Voigt Damping and Non-Smooth Coefficients</i>

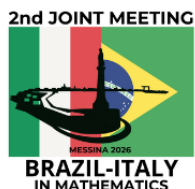


Special Session SS2 - "Continuous Optimization and Related Areas"

Building: Economia

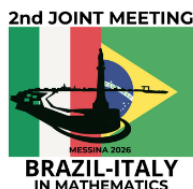
Room: Aula Magna 1

Thursday, 10 September	
11:00 – 11:20	Marco Locatelli <i>Hidden convexity in speed planning problems along a given path</i>
11:20 – 11:40	Laura Palagi <i>Selecting features in nonlinear SVM: MINLP formulation, convex MIQP relaxations and training algorithms</i>
11:40 – 12:00	Luis Felipe Bueno <i>A Jacobi-type Newton method for Nash equilibrium problems with descent guarantees</i>
12:00 – 12:20	Benedetta Morini <i>An Objective Function Free Trust-Region Framework for Decentralized Optimization</i>
12:20 – 12:40	Valentina De Simone <i>Low-Dimensional Acceleration Strategies for Gradient Methods</i>
14:30 – 14:50	Francisco Facchinei <i>Ghost penalties and stochastic programmin</i>
14:50 – 15:10	Silvia Villa <i>The zeroth order proximal algorithm</i>
15:10 – 15:30	Majela Pentón Machado <i>Inertial proximal point methods with degenerate preconditioning</i>
15:30 – 15:50	Alfredo Iusem <i>On circumcentered direct methods for monotone variational inequality problems</i>
15:50 – 16:10	Di Liu <i>A Finitely Convergent Circumcenter Method for the Convex Feasibility Problem</i>
16:10 – 16:30	Roger Behling <i>The Method of Ellipcenters for Strongly Convex Minimization</i>



Special Session 3 – “New challenges on Numerical methods for differential problems”

Monday, 7th of September Building: Economia, 3rd floor Room: Aula 7	
14:30 – 14:50	Ana Maria Alonso Rodriguez <i>An Evolve-Filter-Relax regularization model for the numerical simulation of incompressible MHD flows</i>
14:50 – 15:10	Joao Steinstrasser <i>Parallel-in-time numerical methods: challenges and applications</i>
15:10 – 15:30	Armando Coco <i>High-Order Boundary Treatment in Unfitted Methods for Partial Differential Equations</i>
15:30 – 15:50	José Alberto Cuminato <i>Numerical Simulation of Viscoelastic Fluid Flows</i>
15:50 - 16:10	Ilario Mazziere <i>Space-time domain decomposition methods for wave-propagation problems</i>
16:10 - 16:30	Giuseppe Romanazzi <i>Numerical analysis of a supra-convergent method applied to a nonlinear pressure-cell density dynamics problem over non uniform meshes</i>
Monday, 7th of September Building: Economia, 2nd floor Room: Aula 2	
18:00 – 18:20	Alessandro Russo <i>Dealing with arbitrarily distorted 8-node bricks</i>
18:20 – 18:40	Gianluca Frasca-Caccia <i>Matrix-Oriented Solution of a Pitting Corrosion Model</i>
18:40 – 19:00	Eduardo Cardoso de Abreu <i>An Innovative Lagrangian-Eulerian Approach for Conservation Laws: Structure-Preserving Discretization and Emerging Challenges</i>



Special Session 4 – “Algebraic Geometry towards Commutative Algebra, Combinatorics and Applications”

Building: Rettorato

Room: Accademia Peloritana dei Pericolanti

Monday, 7 September	
11:00 – 11:20	Giorgio Ottaviani <i>Persistent symmetric tensors and their Hessian</i>
11:20 – 11:40	Aron Simis <i>The Rose-Terao/Yuzvinsky theorem revisited and extended</i>
11:40 – 12:00	Francesco Russo <i>Twenty years of homaloidal and vanishing hessian (cubic) polynomials between Pernambuco and Sicily</i>
12:00 – 12:20	Giovanna Ilardi <i>Milnor Algebras, Higher Jacobians and Singular Hyperplane Sections</i>
12:20 – 12:40	Alan Muniz <i>Minimal-degree foliations on cominuscule Grassmannians</i>
12:40 – 13:00	Concettina Galati <i>On nodal deformations of ordinary isolated singularities of surfaces in P^3</i>
14:30 – 14:50	Philippe Thierry Gimenez <i>Betti diagrams of edge ideals with a special shape</i>
14:50 – 15:10	Roberta Di Gennaro <i>The Waldschmidt Constant for a Special Partial Intersection</i>
15:10 – 15:30	Paola Supino <i>Null Hessian Taylor Hypersurfaces</i>
15:30 – 15:50	Giuseppe Favacchio <i>When Is the General Projection of a Finite Set of Points a Complete Intersection?</i>
15:50 – 16:10	Thiago Holleben <i>Incidence toric ideals and three-point functions</i>
16:10 – 16:30	Maral Mostafazadehfard <i>Characterization of Gorenstein Special Fiber Rings of Ladder Determinantal Modules</i>

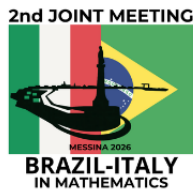


Special Session 5 - “Applied Functional Analysis, Integration Theories, and Related Topics”

Building: Economia

Room: Aula Magna 2

Wednesday, 9 September	
11:00 – 11:20	Martin Grothaus <i>Characterization of the (fractional) Malliavin--Watanabe--Sobolev spaces $\mathfrak{D}^{\alpha,2}$ via the Bargmann- Segal norm</i>
11:20 – 11:40	Jaqueline Godoy Mesquita <i>Slow and Fast Dynamics in Measure FDEs with State-Dependent Delays through Averaging and its Applications to Extremum Seeking</i>
11:40 – 12:00	Francesco Carlo De Vecchi <i>Lie Symmetries of SDEs and Integration by Parts Formulas for Stochastic Processes</i>
12:00 – 12:20	Federico Stra <i>Maximal L^p concentration of the Wigner and Born-Jordan distributions</i>
14:30 – 14:50	Marcia Federson <i>States and Propagators in the Kuelbs--Steadman Hilbert Space</i>
14:50 – 15:10	Sonia Mazzucchi <i>Chernoff solutions of the heat and the Schrödinger equation in the Heisenberg group</i>
15:10 – 15:30	Marielle Silva <i>Oscillation theory for linear evolution processes</i>
15:30 – 15:50	Stefano Bonaccorsi <i>Limit Theorems for stochastic volterra processes via markovian lifts</i>



Special Session 06 – “Arithmetic, Geometry and Combinatorics of Projective varieties”

Building: Economia, 3rd floor

Room: Aula 6

Tuesday, 8 September	
11:00 – 11:20	Ciro Ciliberto <i>On the degree of a modular map</i>
11:20 – 11:40	Giovanna Ilardi <i>Constructing free plane curves by lines and osculating conics</i>
11:40 – 12:00	Francesca Cioffi <i>Initial ideal of a general rational or elliptic curve on quadrics</i>
12:00 – 12:20	Roberto Pignatelli <i>Surfaces with non-polyhedral effective cone</i>
12:20 – 12:40	Arvid Perego <i>Kählerness of moduli spaces of sheaves on K-trivial Kähler surfaces</i>
15:10 – 15:30	Elizabeth Gasparim <i>Singularities of Calabi-Yau Threefolds and Universal Quilts</i>
15:30 – 15:50	Roberta di Gennaro <i>Complete intersection algebras with binomial Macaulay dual generator and Lefschetz properties</i>
15:50 – 16:10	Eleonora Anna Romano <i>On the Geometry of Conic Fibrations over Mori Dream Spaces</i>
16:10 – 16:30	Fabrizio Catanese <i>The classification of surfaces of general type with $p_g=q=2$, and new progress for the case $K^2=7$</i>

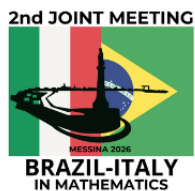


Special Session SS7 - "Recent Developments in Nonlinear Partial Differential Equations"

Building: Economia, 3rd floor

Room: Aula 7

Tuesday, 8 September	
11:00 – 11:20	Carlo Mercuri <i>Solutions to nonlinear Shrödinger equations involving Coulombic interactions</i>
11:20 – 11:40	Sandra Imaculada Moreira <i>Quasilinear elliptic problems with exponential growth via the Nehari manifold method</i>
11:40 – 12:00	Luigi Muglia <i>Second order boundary regularity for degenerate elliptic problems</i>
12:00 – 12:20	Gustavo Ferron Madeira <i>A critical Neumann problem with anisotropic p-Laplacian</i>
14:30 – 14:50	Antonia Passarelli di Napoli <i>Fractional higher differentiability for solutions of stationary stokes systems with Orlicz growth</i>
14:50 – 15:10	Michaela Porzio <i>The influence of the data on the sign of the solutions to some elliptic and parabolic PDE's</i>
15:10 – 15:30	Mayra Soares <i>Advances in solving nonlinear Schrödinger equations with general potentials</i>

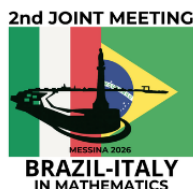


Special Session 08 - "Advances in Inverse Problems: Theory, Algorithms, and Applications"

Building: Economia, 3rd floor

Room: Aula 7

Thursday, 10 September	
11:00 – 11:20	Eva Sincich <i>Lipschitz Stability for Polyhedral Elastic Inclusions from Partial Data</i>
11:20 – 11:40	Alexandre Kawano <i>Passive underwater hearing by measurements in vibrating beams</i>
11:40 – 12:00	Nelson Kuhl <i>An all-at-once formulation for the electrical resistivity problem</i>
12:00 – 12:20	Helcio Orlande <i>Thermal characterization of fungal colonies</i>
12:20 – 12:40	Luca Ratti <i>Integrating Machine Learning and Variational Regularization in Electrical Impedance Tomography</i>
12:40 – 13:00	Antonino Morassi <i>Unique identification of a rigid inclusion in an elastic nanoplate from a single measurement</i>

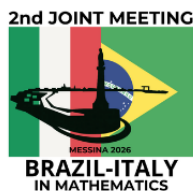


Special Session 9 - "Integration by parts vs fully-nonlinear approach: existence, regularity, qualitative properties"

Building: Giurisprudenza

Room: Aula 2 "A. Falzea"

Wednesday, 9 September	
11:00 – 11:20	Pêdra Andrade <i>Calderón-Zygmund Estimates for Parabolic p-Laplacian Systems with Non-Divergence Data</i>
11:20 – 11:40	João Vítor Da Silva <i>Schauder estimates for flat solutions to a class of fully nonlinear elliptic PDEs with Dini continuous data</i>
11:40 – 12:00	Ayana Pinheiro de Castro Santana <i>On the Existence, Regularizing Effects, and Asymptotic Behavior of (p,q)-Laplacian Schrödinger–Maxwell Systems</i>
12:00 – 12:20	Francescantonio Oliva <i>1-Laplace Dirichlet problems with lower order terms</i>
14:30 – 14:50	Cintia Pacchiano Camacho <i>Unified A-priori Estimates for Minimizers under p,q-Growth and Exponential Growth</i>
14:50 – 15:10	Gloria Paoli <i>Hessian operators and overdetermined problems: symmetry and stability results</i>
15:10 – 15:30	Antonia Passarelli di Napoli <i>On the interplay between the anisotropy and the regularity of the coefficients in non autonomous problems</i>
15:30 – 15:50	Mayra Soares <i>Regularity Estimates for a Nonhomogeneous Free Boundary Interface Problem</i>



Special Session 10 - Fourier Analysis and PDEs on Manifolds and Lie Groups

Building: Economia, 3rd floor

Room: Aula 8

Wednesday, 9 September	
11:00 – 11:20	Sandra Lucente <i>Semilinear Damped Wave Equations with Potential on Compact Lie Groups</i>
11:20 – 11:40	Paulo Leandro Dattori da Silva <i>Global Properties of Tube-Type Systems of Vector Fields on Compact Manifolds</i>
11:40 – 12:00	Marcello d'Abbicco <i>L^1 Estimates for a Dissipative System of Elastic Waves</i>
12:00 – 12:20	Sandro Coriasco <i>Involutive Systems on Non-Compact Manifolds</i>
12:20 – 12:40	Pedro Meyer Tokoro <i>Global Hypoellipticity of Involutive Systems on Non-Compact Manifolds</i>
14:30 – 14:50	Wagner de Moraes <i>Global Properties of Operators on Compact Lie Groups and Beyond</i>
14:50 – 15:10	Serena Federico <i>Smoothing Properties of Third Order Operators with Variable Coefficients</i>
15:10 – 15:30	Fernando de Ávila <i>Time-Periodic Evolution Equations</i>
15:30 – 15:50	Alessia Ascanelli <i>Degenerate 3-Evolution Equations in Gevrey Classes</i>
15:50 – 16:10	Marco Cappiello <i>Global Solvability in Time-Periodic Gelfand-Shilov Spaces for a Class of First Order Operators</i>



Special Session SS11 - “New Trends on Calculus of Variations and Partial Differential Equations”

Building: Giurisprudenza

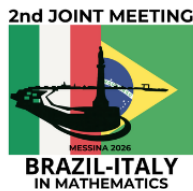
Room: Aula 2 “A. Falzea”

Monday, 7 September	
11:00 – 11:20	Veronica Felli <i>Magnetic Neumann problems with Aharonov-Bohm potentials</i>
11:20 – 11:40	Anna Mercaldo <i>Singular elliptic equations having a gradient term with natural growth</i>
11:40 – 12:00	Mayra Soares <i>On the asymptotically linear problem for an elliptic equation with an indefinite nonlinearity</i>
12:00 – 12:20	Denilson Pereira <i>A new Minimax Theorem for C^1- Functionals with Nehari Set Homeomorphic to Submanifolds of the Sphere and Applications to Elliptic PDEs</i>
12:20 – 12:40	Leszek Gasinski <i>Quasilinear nonlocal problem via topological, variational and set-valued methods</i>
12:40 – 13:00	Liliane Maia <i>Advances in solving nonlinear Schrödinger Equations with general potentials</i>
Lunch	
14:30 – 14:50	Kaye Silva <i>Prescribed energy solutions to some scaled problems via a scaled Nehari manifold</i>



Special Session 12 - "Topological methods for the qualitative analysis of differential equations"

Thursday, 10 September	
Building: Economia, 3rd floor Room: Aula 6	
11:00 – 11:20	Jaqueline Godoy Mesquita <i>A competitive chemostat model with time-dependent delays</i>
11:20 – 11:40	Márcia Federson <i>Non-Absolute Integration and Random Dynamics</i>
11:40 – 12:00	Luisa Malaguti <i>A topological degree for studying epidemic models with age-structured population</i>
12:00 – 12:20	Paola Rubbioni <i>Optimal Periodic Strategies for Integro-Differential Equations with Feedback Controls and Nonlocal Spatiotemporal Dispersal</i>
12:20 – 12:40	Serena Matucci <i>Global positive increasing solutions for equations with double-phase operator</i>
Friday, 11 September	
Building: Economia, 3rd floor Room: Aula 7	
8:30 – 8:50	João Marcos Bezerra do Ó <i>Functional Inequalities with Boundary Terms</i>
8:50 – 9:10	Guglielmo Feltrin <i>Continuation theorems for periodic systems and applications to problems with nonlinear time-dependent differential operators</i>
9:10 – 9:30	Giuseppe Antonio Veltri <i>An affine Birkhoff-Kellogg type result in product spaces and its application to differential systems</i>
9:30 – 9:50	Domenico Scopelliti <i>Exploring set-valued selection problems: from fixed points to differential inclusions</i>
9:50 – 10:10	Pierluigi Benevieri <i>Periodic solutions for second order time and state-dependent delay equations with a non-asymptotic condition</i>



Special Session 14 – “Control, Stability and Delay Effects in Real-Life Mathematical Models”

Building: Economia, 3rd floor

Room: Aula 8

Thursday, 10th September	
11:00 – 11:20	Valéria Neves Domingos Cavalcanti <i>Stability for wave models with time-dependent memory</i>
11:20 – 11:40	Fabio Camilli <i>Preserving Information: Kolmogorov Entropy of Numerical Conservation Laws</i>
11:40 – 12:00	Sarah Ismail <i>Mixed-Order Damping Strategies for Hybrid Flexible Beams</i>
12:00 – 12:20	Carlos Manuel Guzman Jimenez <i>Recent Advances on the Scattering Conjecture for Nonlinear Schrödinger Equations</i>
12:20 – 12:40	Marcelo Moreira Cavalcanti <i>Polynomial Stability of the Wave Equation with Pure Boundary Memory: a Frequency-Domain Approach</i>
12:40 – 13:00	Monica Motta <i>Higher-Order No-Gap Conditions in optimal impulsive control via Compatible Clarke Tangent and QDQ Approximating Cones</i>
Friday, 11th September	
9:10 – 9:30	Elisa Continelli <i>Agent-based models and MFG with large discount</i>
9:30 – 9:50	Maria Rosario Astudillo Rojas <i>On the Asymptotic Behavior of Transmission Problems for the Wave Equation</i>
9:50 – 10:10	Angela Monti <i>Z-Control for Exponential Consensus in High-Order Multi-Agent Systems</i>
10:10 – 10:30	Juan Bautista Limaco Ferrel <i>On Pareto and Nash equilibria for Boussinesq fluids with multiplicative controls</i>



Special Session 15 - “Logic and Foundations of Mathematics”

Building: Economia, 3rd floor

Room: Aula 7

Wednesday, 9 September	
11:00 – 11:20	Rodrigo Freire <i>The minimality of first-order logic</i>
11:20 – 11:40	Serafina Lapenta <i>Reasoning with vague events: Probabilistic Logics Grounded in Łukasiewicz Logic</i>
11:40 – 12:00	Santi Spadaro <i>The cellular-Lindelöf property and cardinal invariants of (and above) the continuum</i>
12:00 – 12:20	Luca San Mauro <i>Left and Right Effective Actions on Baire and Cantor Space</i>
14:30 – 14:50	Anna de Mase <i>When are valuations automatically definable?</i>
14:50 – 15:10	Hugo Mariano <i>Craig interpolation from Horn semantics</i>
15:10 – 15:30	José Siqueira <i>A double-categorical approach to coalgebraic modal logic</i>
15:30 – 15:50	Luca Spada <i>An equational axiomatisation for metrically complete l-groups</i>



Special Session 16 – “Algebras with Polynomial Identities”

Building: Economia, 3rd floor

Room: Aula 8

Tuesday, 08 September	
11:00 – 11:20	Ivan Shestakov <i>Simple Jordan superalgebras</i>
11:20 – 11:40	Sebastiano Argenti <i>Algebras with Hopf action and almost polynomial growth</i>
11:40 – 12:00	Rafael dos Santos <i>Varieties of $(C_p, *)$-algebras of exponent 2</i>
12:00 – 12:20	Luisa Carini <i>New examples of fundamental algebras</i>
12:20 – 12:40	Wesley Cota <i>Asymptotic behavior of the codimension sequence in G-graded algebras with involution</i>
12:40 – 13:00	Daniela Correa <i>On polynomial identities of finite algebras</i>
14:30 – 14:50	Antonio Ioppolo <i>Recent developments in algebras with trace</i>
14:50 – 15:10	Daniela La Mattina <i>Growth of codimension sequences</i>
15:10 – 15:30	Fabrizio Martino <i>Color involution on upper triangular matrices and almost polynomial growth of $*$-varieties</i>
15:30 – 15:50	Elena Pascucci <i>PI-quivers via incidence algebras</i>
15:50 – 16:10	Elena Aladova <i>Outer automorphisms of the category of free non-associative algebras with unit</i>
16:10 – 16:30	Pedro Fagundes <i>Identities with superinvolution for 4×4 upper triangular matrices</i>

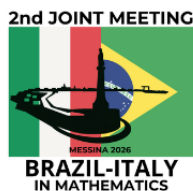


Special Session 17 – “Category theory and Applications”

Building: Giurisprudenza

Room: Aula Ex-Chimica

Thursday, 10 September	
11:00 – 11:20	Sandra Mantovani <i>Propointed categories</i>
11:20 – 11:40	José Siqueira <i>Hyperdoctrines are double functors</i>
11:40 – 12:00	Elena Caviglia <i>Relational calculus in algebra and logic</i>
12:00 – 12:20	Luca Reggio <i>Beth companions of locally finitely presentable categories</i>
12:20 – 12:40	Pedro Henrique Azevedo de Amorim <i>2-Categorical Methods in Programming Language Theory</i>
12:40 – 13:00	Alan Stefano Cigoli <i>Cartesian and additive opindexed categories</i>
14:30 – 14:50	Fernando Lucatelli Nunes <i>Beyond Mac Lane Strictification</i>
14:50 – 15:10	Vincenzo Marra <i>Stone–Gelfand duality, arithmetic spaces, and lax comma categories</i>
15:10 – 15:30	Benjamin Merlin Bumpus <i>Categorical Algorithmics of Codecompositions</i>
15:30 – 15:50	Maria Emilia Maietti <i>Topos-like Completions</i>
15:50 – 16:10	Hugo Luiz Mariano <i>Grothendieck prelopologies: towards a closed monoidal sheaf category</i>

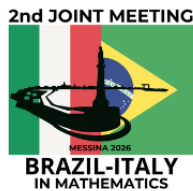


Special Session 18 – “Optimal Control, Optimal Transport and Related Fields”

Building: Economia, 3rd floor

Room: Aula 8

Monday, 7th September	
11:00 – 11:20	Adriano Festa <i>A Mean Field Games Perspective on Evolutionary Clustering</i>
11:20 – 11:40	Marco Caponigro <i>Geometric control of optimal transport maps</i>
11:40 – 12:00	Valeriano A. De Oliveira <i>A new constraint qualification for continuous-time nonlinear programming based on asymptotic KKT conditions</i>
12:00 – 12:20	Lucas Machado Moschen <i>Feedback Control and Local Convexification of Wasserstein Gradient Flows</i>
12:20 – 12:40	Pedro Otavio de Souza Mussatto <i>An Asymptotic Maximum Principle for Impulsive Optimal Control Problems</i>
17:00 – 17:20	Daniela Tonon <i>Vanishing viscosity limit for Hamilton–Jacobi equations in the Wasserstein space</i>
17:20 – 17:40	Michele Palladino <i>Optimal Control and Reinforcement Learning</i>
17:40 – 18:00	Alfio Borzi <i>Optimal control of the viscous wave equation via the Pontryagin maximum principle</i>

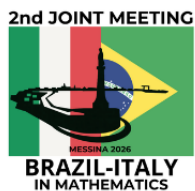


Special Session 19 - “Improvements in climate models for attribution, extreme phenomena and climate change impacts”

Building: Rettorato

Room: Accademia Peloritana dei Pericolanti

Thursday, September 10	
11:00 – 11:20	Masahiro Yamamoto <i>Time-fractional degenerate diffusion equations as possible model for climate changes</i>
11:20 – 11:40	Genni Fragnelli <i>Null-controllability for degenerate PDEs: A climatological application.</i>
11:40 – 12:00	Carlos Frederico Mendonça Raupp <i>A Possible Dynamical Mechanism for Global Warming Impact on Nature Climate Variability and Extreme Climate Events</i>
12:00 – 12:20	Giovanni Conti <i>Data as the Backbone of Climate Science: Novel Data Assimilation Pathways with Transfer Operators and Graph Attention Networks</i>
12:20 – 12:40	Pedro Leite da Silva Dias <i>Mathematical Representations of Earth System Dynamics: From Phase Space to Interacting Natural Modes</i>
12:40 – 13:00	Anna Vidotto <i>Testing for Non-Stationarity in Time-Dependent Spherical Random Fields</i>
Friday, September 11	
8:30 – 8:50	Gianmarco Del Sarto <i>A Multiplicative-Noise Mechanism for Variability Amplification under Radiative Forcing in an Arctic Energy-Balance Model</i>
8:50 – 9:10	Tobias Kuna <i>Reconstruction of wide spectrum forcing in transport-diffusion and Navier-Stokes equations</i>
9:10 – 9:30	Daria Ghilli <i>Optimal policies for environmental assets under spatial heterogeneity and global awareness</i>
9.30-9.50	Andrea Vito Vacca <i>Climate change reduces the subseasonal variability of the North Atlantic jet stream</i>
9:50 – 10:10	Giuseppe Floridia <i>Recent Advances in the Analysis of Energy Balance Climate Models</i>

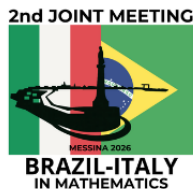


Special Session 20 - "Global Analysis and Geometry of semi-Riemannian Manifolds"

Building: Economia

Room: Aula Magna 1

Tuesday, 8 September	
11:00 – 11:20	Keti Tenenblat <i>On the inverse mean curvature flow by parallel hypersurfaces in space forms</i>
11:20 – 11:40	Maria Andrade <i>Rigidity for Serrin's Problem in Riemannian manifolds</i>
11:40 – 12:00	Ana Ferreira <i>Left-invariant G^*_2-structures of type III</i>
12:00 – 12:20	Federico Rossi <i>Einstein metrics and Killing spinors on pseudo-Riemannian solvmanifolds</i>
12:20 – 13:00	Open Discussions
14:30 – 14:50	Diego Conti <i>Into the indefinite</i>
14:50 – 15:10	Giulia Dileo <i>A new approach to the classification of almost contact metric manifolds</i>
15:10 – 15:30	Anna Maria Fino <i>A New Construction Related to Twistor Spaces</i>
15:30 – 16:30	Open Discussions



Special Session SS21 - "Probability and Statistical Mechanics"

Building: Economia, 2nd floor Room: Aula 3

Tuesday, 8 September	
11:00 – 11:20	Milton Jara <i>NESS for KPZ</i>
11:20 – 11:40	Chiara Franceschini <i>Degree-preserving conservative processes and a unified approach for their hydrodynamics</i>
11:40 – 12:00	Renato Santos <i>Weakly self-avoiding random walk in a random potential</i>
12:00 – 12:20	Vittoria Silvestri <i>Gaussian fluctuations for IDLA on cylinders</i>
12:20 – 12:40	Rangel Baldasso <i>Percolation on hierarchical lattices</i>
12:40 – 13:00	Luca Avena <i>Network multiple-node immunization via random rooted forests</i>
14:30 – 14:50	Alessandra Faggionato <i>Equilibrium Fluctuations of the SSEP on Random Graphs with Conductances</i>
14:50 – 15:10	Leandro Chiarini <i>Imry-Ma phenomenon for the hard-core model on Z^2</i>
15:10 – 15:30	Lu Xu <i>New results on the hydrodynamic limits for long-range exclusion processes</i>
15:30 – 15:50	Dirk Erhard <i>Quantitative Wright–Fisher limits for the noisy voter model on Erdős–Rényi graphs</i>
15:50 – 16:10	Federico Sau <i>The critical KPZ scale of the averaging process</i>
16:10 – 16:30	Daniel Valesin <i>The grass-bushes-trees process on a scale-free network</i>



Special Session 22 - "Singularities in Algebra and Geometry"

Building: Rettorato

Room: Aula Cannizzaro

Monday, 7 September	
11:00 – 11:20	Francesco Bei <i>On the cohomology of L^2-harmonic forms of an incomplete Riemannian manifolds</i>
11:20 – 11:40	Dahisy Lima <i>Topological and Algebraic Structures of Singularity Collisions</i>
11:40 – 12:00	Zbigniew Jelonek <i>The proof of the metric corank Arnold problem</i>
12:00 – 12:20	Annalisa Baldi <i>Functional inequalities for differential forms on Carnot groups</i>
14:30 – 14:50	Luiz Hartmann <i>Torsion Invariants on Spaces with Isolated Singularities</i>
14:50 – 15:10	Maria Michalska <i>Lipschitz embeddings of algebraic curves</i>
15:10 – 15:30	Paolo Piazza <i>Witt pseudomanifolds, the signature operator and Gysin maps in K-homology</i>

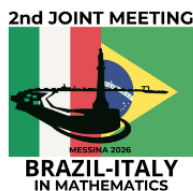


Special Session 23 - “Mathematical connections between Italy and Brazil. The circulation of Italian scholars in Latin America and the foundation of the first Brazilian universities”

Building: Rettorato

Room: Accademia Peloritana dei Pericolanti

Thursday, 10 September	
14:30 – 14:50	Luciana Vieira <i>Luigi Fantappiè, mathematics, and fascism in Brazil: when science diplomacy is not synonymous with cooperation (1934-1939)</i>
14:50 – 15:10	Maria Giulia Lugaresi <i>From INAC to Brazil, Luigi Sobrero and the teaching of Mathematical Physics in Rio de Janeiro</i>
15:10 – 15:30	Maria Anna Raspanti <i>Giacomo Albanese and the Italian Mission in Brazil</i>
15:30 – 15:50	Maria Alessandra Vaccaro <i>A review of Gabriele Mammana’s teaching and research activities between Italy and Brazil</i>
15:50 – 16:10	Elena Scalambro <i>An Italian voice in Brazil: the trajectory of Achille Bassi (1907-1973)</i>
16:10 – 16:30	Marina Marchisio Conte <i>Shaping topology across borders: Gino Fano and Achille Bassi in dialogue (1926-1945)</i>



Special Session 24 - "Conservation Laws for Fluid and Transport Models: Analysis and Numerics"

Building: Giurisprudenza

Room: Aula Ex Chimica

Monday, 7 September	
11:00 – 11:20	Mario Putti <i>Geometric intrinsic modeling of shallow water flows</i>
11:20 – 11:40	Eduardo Abreu <i>A geometric vector field approach for multidimensional conservation laws: from scalar entropy to Lax positivity system</i>
11:40 – 12:00	Laura Spinolo <i>Stability of dispersive boundary layers for scalar conservation laws in one space dimension</i>
12:00 – 12:20	Luca Talamini <i>A differential structure for general conservation laws</i>
12:20 – 12:40	Laura Caravenna <i>Local asymptotic patterns for viscous approximation of conservation laws</i>
12:40 – 13:00	Graziano Guerra <i>Conservation laws with coinciding smooth solutions and the isentropic approximation in gas dynamics</i>
14:30 – 14:50	Annalisa Cesaroni <i>A Lagrangian representation to the classical LWR model and application to the analysis of commuting times in a linear city</i>
14:50 – 15:10	Mauro Gravello <i>Structure of optimal solutions for traffic flows</i>
15:10 – 15:30	Massimiliano Rosini <i>Entropy solutions for Temple-class systems with discontinuous flux</i>
15:30 – 15:50	Wanderson Lambert <i>Theoretical aspects of a Lagrangian-Eulerian Method for Hyperbolic Conservation laws</i>
15:50 – 16:10	Elena Bachini <i>A geometric Lagrangian-Eulerian formulation for the intrinsic shallow water equations on general topography</i>



Special Session 25 - "Geometric Analysis"

Building: Economia, 2nd floor

Room: Aula 2

Monday, 7 September	
11:00 – 11:20	Mattia Fogagnolo <i>3D scalar curvature bounds through the inverse mean curvature flow in low regularity</i>
11:20 – 11:40	Luciano Luzzi Jr. <i>Zoll families and Isosystolic Inequalities</i>
11:40 – 12:00	Virginia Agostiniani <i>p-Laplace Serrin problem on planar annuli</i>
12:00 – 12:20	Allan Freitas <i>On Rigidity of Sub-Static Systems</i>
12:20 – 12:40	Francesca Oronzio <i>X--ADM mass and X--Positive Mass Theorem</i>
12:40 – 13:00	Maria Andreade <i>Critical points of the total σ^2-curvature functional</i>
14:30 – 14:50	Claudia Pontuale <i>Some rigidity theorems for stable constant (anisotropic) mean curvature hypersurfaces</i>
14:50 – 15:10	Ilaria Mondello <i>Limits of manifolds and codimension 4 singularities</i>



Special Session 26 - "Group Theory and Applications"

Building: Giurisprudenza

Room: Aula Ex Chimica

Wednesday, 9 September	
11:00 – 11:20	Cristina Acciarri <i>On profinite groups with restricted centralizers of nth powers</i>
11:20 – 11:40	Altair Santos de Oliveira Tosti <i>Conjugacy in Group of Piecewise Projective Homeomorphisms</i>
11:40 – 12:00	Antonio Tortora <i>The Learning With Errors Problem over Groups</i>
12:00 – 12:20	Marialaura Noce <i>Verbal subgroups of groups acting on regular rooted trees</i>
12:20 – 12:40	Claude Marion <i>On monomiality and prime graphs of finite groups with the Magnus property</i>
14:30 – 14:50	Luis Mendonça <i>Finiteness properties of subgroups of fixed points</i>
14:50 – 15:10	Chiara Nicotera <i>On twisted conjugacy in finite groups</i>
15:10 – 15:30	Alex Carrazedo Dantas <i>Self-similarity of permutational wreath product</i>
15:30 – 15:50	Marco Trombetti <i>On the Equational Noetherianity of Wreath Products</i>
15:50 – 16:10	Millena Andrade da Silva <i>On the commuting conjugacy class graph</i>
16:10 – 16:30	Marta Morigi <i>Commuting probability of Sylow subgroups in finite and profinite groups</i>

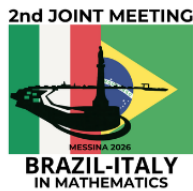


Special Session SS27 - “Machine Learning for Numerical Methods in PDEs”

Building: Economia, 3rd floor

Room: Aula 6

Thursday, 10 September	
14:30 – 14:50	Gioana Teora <i>C^0-Conforming Neural Approximated Virtual Element Method on Polygonal Meshes</i>
14:50 – 15:10	Nunzio Dimola <i>Neural Preconditioning Strategies for Mixed-Dimensional PDEs: from Static to Dynamic Training</i>
15:10 – 15:30	Samira Iscaro <i>Efficient numerical treatment of multidimensional reaction-diffusion PDEs</i>
15:30 – 15:50	Angela Monti <i>Hierarchical Clustering and Model Reduction for Optimal Control of ABMs</i>
15:50 – 16:10	Lucas Moschen <i>A Feedback-Control Perspective on Sampling for Langevin and McKean–Vlasov Dynamics</i>
16:10 – 16:30	Mariateresa Bruni <i>Derivative-Enhanced Pseudo-Labeling for Predictor-Corrector PINNs</i>



Special Session SS28 - "Recent progress on mathematical fluid dynamics"

Building: Giurisprudenza

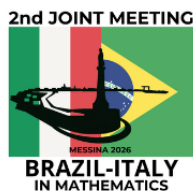
Room: Aula 2 A. Falzea

Thursday, 10 September	
11:00 – 11:20	Anne Bronzi <i>On the self-similar blowup for the generalized SQG equations</i>
11:20 – 11:40	Gennaro Ciampa <i>Magnetic relaxation for the MHD equations via the stable manifold method</i>
11:40 – 12:00	Milton da Costa Lopes Fihlo <i>Incompressible 2D Euler with random initial data in the plane</i>
12:00 – 12:20	Nicola De Nitti <i>A Liouville theorem for the two-dimensional stationary hypodissipative Navier–Stokes system</i>
14:30 – 14:50	Lorenzo Pescatore <i>Long-time behaviour of the 1D stochastic Navier-Stokes-Korteweg equations</i>
14:50 – 15:10	Gabriella Planas <i>Global Behavior of Chemotaxis-Fluid Systems</i>
15:10 – 15:30	Stefano Spirito <i>Analysis of the theta method for the flow of nonsmooth velocity fields</i>
15:30 – 15:50	Ricardo Rosa <i>Energy cascade for cross-shear length scales in free-shear three-dimensional incompressible viscous flows</i>



Special Session SS29- “Finite Geometry, Galois Fields and Their Impact on Contemporary Coding Theory”

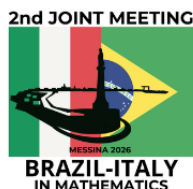
Wednesday, 9 September	
Building: Rettorato Room: Accademia Peloritana dei Pericolanti	
11:00 – 11:20	J. De Beule <i>Tight sets in finite classical polar spaces</i>
11:20 – 11:40	P. Santonastaso <i>On pseudo-arcs from normal rational curve and additive MDS codes</i>
11:40 – 12:00	F. Pavese <i>(r, s) – sets from Desarguesian ovoids</i>
12:00 – 12:20	V. Astore <i>A q-analogue of the rational normal curve and linearized Reed–Solomon codes</i>
12:20 – 12:40	F. Silva <i>On some generalisations of checkerboard lattices through linear codes</i>
12:40 – 13:00	A. Giannoni <i>Thresholds for a geometric Tic-Tac-Toe over finite fields</i>
Wednesday, 9 September	
Building: Giurisprudenza Room: Aula 3 Scalisi	
14:30 – 14:50	H. Borges <i>On some special curves of type $y^n = f(x)$</i>
14:50 – 15:10	M. Timpanella <i>Algebraic curves with large cyclic subgroups of automorphisms</i>
15:10 – 15:30	P. Speziali <i>Curves on Frobenius Nonclassical Loci of Hypersurfaces</i>
15:30 – 15:50	G. Schulte <i>A generalization of the Datta-Johnsen codes</i>
15:50 – 16:10	M. Bonini <i>On the Minimal Codewords and Weight Distribution of Norm-Trace Codes</i>



Special Session 30 - "Variational and topological methods for local and nonlocal problems"

Building: Economia, 3rd floor Room: Aula 2

Wednesday, 9 September	
11:00 – 11:20	Olimpio Hiroshi Miyagaki <i>On compact embedding into L^p and fractional spaces</i>
11:20 – 11:40	Marco Gallo <i>Making a Brunelleschi out of it: concavity in PDEs</i>
11:40 – 12:00	Suellen Arruda <i>On the existence of multiple solutions for singular integro-differential equations driven by the fractional Laplacian</i>
12:00 – 12:20	Sunra Mosconi <i>An overview of the regularity theory for the fractional p-Laplacian</i>
12:20 – 12:40	Alânio Barbosa Nóbrega <i>A Critical Neumann problem with anisotropic p-Laplacian</i>
14:30 – 14:50	Francesca Prinari <i>Eigenvalues of the p-Laplacian on general open sets</i>
14:50 – 15:10	Eudes Mendes Barboza <i>Existence results for some elliptic problems in R^N including variable exponents above the critical growth</i>
15:10 – 15:30	Matteo Rizzi <i>Normalized solutions to a p-Laplacian supercritical equation</i>
15:30 – 15:50	Rúbia Gonçalves Nascimento <i>Existence and behavior of positive solutions for elliptic problems with discontinuous nonlinearities</i>
15:50 – 16:10	Umberto Guarnotta <i>Strong solutions to singular discontinuous p-Laplacian problems</i>

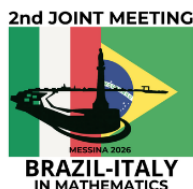


Special Session 31 - "Recent Trends in Nonlinear Elliptic and Parabolic PDEs"

Building: Economia

Room: Aula Magna 1

Wednesday, 9 September	
11:00 – 11:20	Bernhard Ruf <i>Solutions Concentrating on Lower Dimensional Spheres for Singularly Perturbed Elliptic Equations</i>
11:20 – 11:40	Elisandra Gloss <i>Inhomogeneous nonlinear Schrödinger equations with competing singular nonlinearities</i>
11:40 – 12:00	Pedro Ubilla <i>A Supercritical Hamiltonian System</i>
12:00 – 12:20	Marta Calanchi <i>Nonlinearities and singularities in elliptic boundary value problems</i>
12:20 – 12:40	Carlos Alberto Santos <i>About degenerated Kirchhoff logistic problem</i>
12:40 – 13:00	Francesca Dalbono <i>A bifurcation phenomenon for quasilinear p-Laplace equations in the ball</i>
14:30 – 14:50	Federica Sani <i>Symmetry breaking for elliptic equations with exponential nonlinearities in higher dimensions</i>
14:50 – 15:10	Bruno Ribeiro <i>Fractional Schrödinger-Poisson-Slater equations in Coulomb-Sobolev spaces</i>
15:10 – 15:30	Elide Terraneo <i>Fokker-Planck equations and Poincaré inequalities</i>
15:30 – 15:50	Evelina Shamarova <i>FitzHugh-Nagumo-type systems with sign-changing coefficients</i>
15:50 – 16:10	Daniele Cassani <i>On the maximum principle for higher order operators and applications to nonlinear PDEs</i>

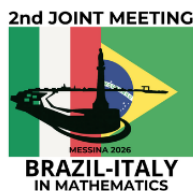


Special Session 32 - "Recent trends in biomathematics: modelling patterns and collective dynamics from micro to macro"

Building: Rettorato

Room: Accademia Peloritana dei Pericolanti

Tuesday, 8 September	
11:00 – 11:20	Luigi Preziosi <i>Modelling Cell Reorientation under Stretch</i>
11:20 – 11:40	Fernanda Pinheiro <i>Growth and efficiency principles of bacterial metabolism</i>
11:40 – 12:00	Maria Carmela Lombardo <i>Exploring immune pathways and remyelination in Multiple Sclerosis</i>
12:00 – 12:20	Nathan Silvano <i>Flow spatial structure determines pattern instabilities in nonlocal models of population dynamics</i>
12:20 – 12:40	Florinda Capone <i>Turing Instability and Pattern Formation in a Spatial HIV Model</i>
14:30 – 14:50	Pablo de Castro <i>Statistical Physics of Active Particles: From Clustering to Survival in Toxic Landscapes</i>
14:50 – 15:10	Martina Conte <i>Multi-scale modeling of action potential dynamics in neural networks</i>
15:10 – 15:30	Rafael Menezes <i>Crowding indexes as a bridge between individual behaviour and population dynamics in spatially-structured populations</i>
15:30 – 15:50	Lucas Wardil <i>The stochastic origins of costly sexual signals</i>

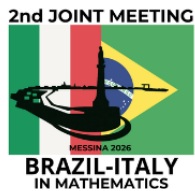


Special Session 33 - "Spectral Graph Theory"

Building: Economia, 3rd floor

Room: Aula 6

Wednesday, 9 September	
11:00 – 11:20	Alfredo Donno <i>A sequence of integral and distance integral Cayley graphs with few distance eigenvalues</i>
11:20 – 11:40	Carlos Hoppen <i>Recent advances on the inverse eigenvalue problem on trees</i>
11:40 – 12:00	Matteo Cavaleri <i>Partial transposition and the construction of cospectral graphs, signed graphs, and complex unit gain graphs</i>
12:00 – 12:20	Renata Del Vecchio <i>Maximum Nullity and Zero Forcing in Generalized Petersen Graphs</i>
12:20 – 12:40	Callum Huntington <i>Graphs and signed graphs with integer reciprocal eigenvalue properties</i>
12:40 – 13:00	Stefano Spessato <i>The NEPS of gain graphs over arbitrary groups and its spectra</i>
14:30 – 14:50	Cybele T.M. Vinagre <i>Characterizing graphs for which the second largest distance eigenvalue is less than $-1/2$</i>
14:50 – 15:10	Adriana Ciampella <i>Determined-by-Adjacency Spectrum problem of signed tadpoles</i>
15:10 – 15:30	Daniele D'Angeli <i>On totally synchronizing graphs</i>
15:30 – 15:50	Maurizio Brunetti <i>Graphs whose second-largest Seidel eigenvalue lies in $[-1, 1]$</i>
15:50 – 16:10	Vilmar Trevisan <i>Brouwer's Conjecture: Recent Developments</i>

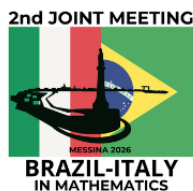


Special Session 34 - "Recent progresses in stochastic fluid dynamics and turbulence"

Building: Economia, 3rd floor

Room: Aula 7

Monday, 7 September	
11:00 – 11:20	Victor De Jesus Valadão <i>The "real" butterfly effect in multiscale models of turbulence</i>
11:20 – 11:40	Andrea Di Primio <i>Stochastic phase separation in complex fluids</i>
11:40 – 12:00	Júlia Domingues Lemos <i>A spatio-temporal random synthetic turbulent velocity field: Beyond Gaussianity, skewness, intermittency and vorticity alignments</i>
12:00 – 12:20	Lorenzo Marino <i>Stochastic transport by heavy-tailed jump processes: From classical to anomalous diffusion</i>
18:00 – 18:20	Claudia Lorena Duarte Espitia <i>On local well-posedness of the stochastic incompressible density-dependent Euler equations</i>
18:20 – 18:40	Gianmarco Del Sarto <i>Global well-posedness for small data in a 3D temperature-velocity model with Dirichlet boundary noise</i>
18:40 – 19:00	Ciro Campolina <i>Turbulence and invariant measures in the Hasegawa–Mima equation</i>



Special Session 35 - "CR geometry and Partial Differential Equations"

Building: Economia

Room: Aula Magna 2

Thursday, 10 September	
11:00 – 11:20	Gustavo Hoepfner <i>Trace of ultradistributions and applications</i>
11:20 – 11:40	Giuseppe Della Sala <i>Parametrization of automorphisms via stationary discs</i>
11:40 – 12:00	Stefan Fördös <i>Ultradifferentiable regularity of CR mappings</i>
12:00 – 12:20	Luis Fernando Ragognette <i>Relation between different types of hypoellipticity</i>
12:20 – 12:40	Marco Mughetti <i>Regularity of sums of squares in two variables and Treves' conjecture</i>
14:30 – 14:50	Andreea Nicoara <i>Behaviour of the q-type under Biholomorphic Mappings</i>
14:50 – 15:10	Vinícius Novelli da Silva <i>Top-degree local solvability for $\overline{\partial}_b$ on rigid hypersurfaces of complex space</i>
15:10 – 15:30	Nicholas Braun Rodrigues <i>Smooth and Gevrey Microlocal Hypoellipticity for a Class of Hypocomplex Tube Structures</i>
15:30 – 15:50	Gabriel Araujo <i>Solvability of nonsingular closed 1-forms on compact manifolds</i>
15:50 – 16:10	Loredana Lanzani <i>Herglotz for general domains</i>



Special Session 36 - "Advances in nonlinear elliptic PDEs and applications"

Building: Economia, ground floor

Room: Aula 1

Tuesday, 8 September	
11:00 – 11:20	Francesca Faraci <i>On a critical Kirchhoff type problem in high dimension</i>
11:20 – 11:40	Kaye Silva <i>Ordered solutions for degenerate Kirchhoff problems</i>
11:40 – 12:00	Giovanni Anello <i>On the Dirichlet problem for a critical Kirchhoff equation in dimension four</i>
12:00 – 12:20	João Rodrigues Santos Jr <i>Characterizing the breakdown of the maximum principle in a class of nonlocal elliptic problems</i>
12:20 – 12:40	Antonio Vitolo <i>Invariant cones for cooperative systems of fully coupled elliptic equations</i>
14:30 – 14:50	Carlos Alberto Santos <i>Mixed effects of fast diffusion and refuge in the logistic equations</i>
14:50 – 15:10	João Vitor da Silva <i>Lipschitz regularity of vectorial almost-minimizers for Alt-Caffarelli functionals with non-standard growth</i>
15:10 – 15:30	Pedra Andrade <i>Local Regularity Estimates for Degenerate Fully Nonlinear</i>



Special Session 37 - "Automata, Dynamics and Topology on Cantor spaces"

Building: Economia

Room: Aula 2, Piano 2

Tuesday, 8 September	
11:00 – 11:20	Daniele D'Angeli <i>Transition groups of context-free graphs and Lehnert's conjecture</i>
11:20 – 11:40	Luis Mendonça <i>Decompositions of groups of pure symmetric automorphisms of RAAGs</i>
11:40 – 12:00	Letizia Issini <i>Divergence in groups with micro-supported actions</i>
12:00 – 12:20	Matteo Tarocchi <i>Conjugacy in Röwer-Nekrashevych groups</i>
12:20 – 12:40	Marialaura Noce <i>Equations in groups acting on regular rooted trees</i>
12:40 – 13:00	Alex Dantas <i>On wreath product occurring as subgroup of automata group</i>
14:30 – 14:50	Valeriano Aiello <i>On Jones's representations of Thompson groups: the subgroups and the knot construction</i>
14:50 – 15:10	Altair Tosti <i>Braided Version of Thompson's Group F: Reidemeister numbers and fixed points</i>
15:10 – 15:30	Bianca Marchionna <i>Geometry and finiteness properties of locally compact RAAGs</i>
15:30 – 15:50	Raimundo Bastos <i>Generalized torsion elements in infinite groups</i>
15:50 – 16:10	Ilaria Castellano <i>Generalised Bieri-Stallings groups</i>
16:10 – 16:30	Open problems discussion and session photo.



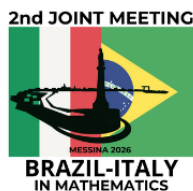
Special Session 38 - Mathematics Education

“Bridging Perspectives in Mathematics Education Research between Italy and Brazil”

Building: Economia, 3rd floor

Room: Aula 6

7 September	
14:30 – 14:50	Marcelo C. Borba <i>Festival of Digital Videos and Mathematics Education</i>
14:50 – 15:10	Francesco Beccuti <i>Education, ideology, and the limits of mathematization</i>
15:10 – 15:30	Caterina Bassi <i>Shared drawings in a mathematical modelling activity: an exploratory study</i>
15:30 – 15:50	Marcia Maria Fusaro Pinto <i>Mathematics education in the teaching of mathematics at university</i>
15:50 – 16:10	Annalisa Cusi <i>Rethinking Instrumental Genesis in Human-GenAI Interaction: Noise and Drift factors in Mathematical Problem Solving</i>
16:10 – 16:30	Plenary discussion
18:00 – 18:20	Miguel Ribero <i>Interpretative Knowledge and Ethical Awareness in Mathematics Teacher Education: Insights from an International Research Collaboration</i>
18:20 – 18:40	Benedetto Di Paola <i>"Cultures Count": Cultural Contaminations in and for Mathematics Teacher Education</i>
18:40 – 19:00	Final discussion



Special Session 39 - "Hamiltonian Systems: Theory and Applications"

Building: Giurisprudenza

Room: Aula Ex Chimica

Tuesday, 8 September	
11:00 – 11:20	Dario Bambusi <i>Almost global existence for Hamiltonian PDEs on boundaryless compact manifolds</i>
11:20 – 11:40	Vivina Barutello <i>On the Birkhoff conjecture for Kepler billiards - I</i>
11:40 – 12:00	Irene De Blasi <i>On the Birkhoff conjecture for Kepler billiards - II</i>
12:00 – 12:20	Gladston Duarte <i>Invariant Manifolds near L_1 and L_2 in the Planar Elliptic Restricted Three-Body Problem</i>
12:20 – 12:40	Guglielmo Feltrin <i>Bifurcation of periodic solutions for central force problems</i>
14:30 – 14:50	Rafael Ruggiero <i>On the set of asymptotic homologies of orbits on invariant Lagrangian graphs</i>
14:50 – 15:10	Nicola Sansonetto <i>Gauge momenta and Hamiltonization in (linear) nonholonomic systems with symmetry</i>



Special Session 40 - "New Trends in Cryptography"

Building: Economia, 2nd floor

Room: Aula 2

Thursday, 10th September	
11:00 – 11:20	Antonio Tortora <i>Cryptographic techniques for secure data aggregation</i>
11:20 – 11:40	Carmine Mirra <i>A group-based Functional Encryption scheme</i>
11:40 – 12:00	Riccardo Aragona <i>Geometric Characterization of Maximal Unrefinable Partitions</i>
12:00 – 12:20	Maria Ferrara <i>A New Algebraic Diffie–Hellman Key-Exchange</i>
12:20 – 12:40	Asmaa Cherkaoui <i>Eidolon: A Post-Quantum Signature Scheme Based on k-Colorability in the Age of Graph Neural Networks</i>
12:40 – 13:00	Carmine Monetta <i>Graphs associated with groups and cryptographic applications</i>