Assembly Hall

Monday 7

11:00 Aitor Couce Vieira (ICMAT): *Decision models for cybersecurity risk analysis*

11:25 Liu Si (ICMAT): *Affective decision making models with applications to social robotics*

11:50 Iván Giménez Palacios (Universitat de València): *Improving the efficiency and stability of iterative methods for solving nonlinear problems*

16:35 Pedro García Segador (Instituto Nacional de Estadística): *Sampling fuzzy measures uniformly. Approach through linear extensions.*

17:00 Ahbli Khalid (Ibn Zohr uiversity, faculty of sciences): *A generating function and formulae defining the first-associated Meixner-Pollaczek polynomials*

17:25 Alejandro Silva Bernárdez (Escuela Técnica Superior de Ingenieros Industriales): *Model-Based Evaluation of Signal Processing Algorithms for the Detection of Rub in Aeroderivative Ga*

Tuesday 8

11:00 Antonio Jiménez Pastor (Research Institute for Symbolic Computation (RISC)): *Extending the holonomic universe: DD-finite functions and Automated identities proofs*

11:25 Alicia Quero de la Rosa (Universidad de Granada): *Numerical index with respect to an operator*

11:50 Miguel Monsalve López (UCM-ICMAT): *On Bishop type operators*

12:15 Antonio Zarauz Moreno (University of Almeria): *Geometric characterisations of $\ell^1(\Gamma)$*

Wednesday 9

11:00 María de Gádor Cabrera Padilla (Universidad de Almería): *A new approach on Lipschitz compact operators*

11:25 Miguel García-Bravo (ICMAT-UAM): *Continuous mappings between Hilbert infinite dimensional Hilbert spaces can be uniformly approximated by smooth mappings with no critical points*

11:50 Óscar Roldán Blay (Universitat de València): *The Riemann Mapping Theorem and extensions*

16:35 Carles Sáez Calvo (BGSMath - UB): *Finite groups acting on 4-manifolds*

17:00 Eduardo Fernández (ICMAT-UCM): *Loops of Legendrians in contact 3-manifolds.*

17:25 Francisco Javier Martínez Aguinaga (ICMAT-UCM): *Flexible horizontal knots.*

17:50 Juan Margalef (UC3M-CSIC): *Geometry, constraints and boundaries, it takes three to tango*

Blue Room

Monday 7

11:00 Pablo Manuel Berná Larrosa (Universidad Autónoma de Madrid): *Some new advances in greedy approximation theory*

11:25 Pablo José Gerlach Mena (Universidad de Sevilla): *Algebraic structures and modes of convergence*

11:50 Diego Martínez (UC3M-ICMAT): *Amenability in (Semi)-Groups and Algebras*

12:15 Hernán Javier Cabana Méndez (ucm): *On a problem by V.I. Gurariy concerning subspaces of continuous functions*

16:35 Eva Primo Tárraga (Universitat de València): *Fourier Integral Operators on weighted modulation spaces*

17:00 Alberto Rodríguez Arenas (Universitat Politècnica de València): *Ergodic properties of the multiplication operator*

17:25 Aleksander Marcin Kubicki (Universidad de Valencia): *A quantitative no-programming theorem*

17:50 David García-García (GFM - Universidade de Lisboa): *Toeplitz matrices, Schur polynomials and group integrals*

Tuesday 8

11:00 Alejandro Tlaie Boria (Center for Biomedical Technology): *Is it complex to be a hub?*

11:25 Daniel Lear (ICMAT): *Global existence for the confined IPM equation*

11:50 Diego Alonso-Orán (Instituto de Ciencias Matemátcas): *The Incompressible Slice Model: local well-posedness and blow-up criterion*

12:15 Hamzah Bakhti (ENSET-UM5, Rabat-Morocco): *Mathematicla Modeling and Vibration Analysis of Thin Pipes Due to Pulsatile Flow: Application to Arterial Wall Vibration*

Wednesday 9

11:00 Simón Rodríguez Santana (ICMAT-CSIC): *Large Scale Automated Forecasting for Monitoring Network Safety and Security*

11:25 Víctor Gallego (ICMAT-CSIC): *From state-space models to Bayesian structural time series: assessing the effect of advertising expenditures upon sales*

11:50 Alberto Redondo (ICMAT-CSIC): *Malware Detection Using Hybrid Analysis*

12:15 Juan Manuel Espín López (Universidad de Murcia - Biometric Vox): *A PhD in the Private Sector. Spoofing attacks in ASV.*

16:35 ARNAB DEY SARKAR (IISER Bhopal): *Automorphism tower of some centreless Groups*

17:00 María CUMPLIDO (Université de Rennes 1 / Universidad de Sevilla): *Braids: a link between topology and algebra*

17:25 Rubén José Muñoz Alcázar (Universidad Rey Juan Carlos): *A brief introduction to linear Jordan algebras*

17:50 Guillermo Vera de Salas (Universidad Rey Juan Carlos): *Algebras and Superalgebras*

Orange Room

Monday 7

11:00 David Iglesias López (Universidad de Murcia): *On discrete versions of Brunn-Minkowski type inequalities*

11:25 Manuel Mellado (Universidad Autónoma de Madrid): *Points in convex figures*

11:50 Antonio Luis Martínez Triviño (Differential Geometry): *Stable regions in a Euclidean ball of $\mathbb{R}^3$*

12:15 Erik Sarrión Pedralva (Universitat Jaume I): *Parabolicity of the Riemannian product of rotationally symmetric spaces*

16:35 Olga Pérez-Barral (Universidade de Santiago de Compostela): *Ruled hypersurfaces with constant mean curvature in complex space forms are minimal*

17:00 Antonio Bueno (Universidad de Granada): *Prescribed mean curvature surfaces in $\mathbb{R}^{n+1}$*

17:25 Jesús Castro Infantes (Universidad de Granada): *Minimal surfaces with finite total curvature in $\mathbb{H}^2 \times \mathbb{R}$*

17:50 José Antonio Sánchez Pelegrín (Universidad de Granada): *From the minimal to the maximal surface equation in certain ambient manifolds*

Tuesday 8

11:00 David Mosquera Lois (Universidade de Santiago de Compostela): *Integration against the Euler-Poincaré characteristic*

11:25 Hang Lu Su (ICMAT): *Thin Triangle Party!*

11:50 Víctor Manuel Jiménez Morales (ICMAT): *Characteristic distribution: An application to material bodies*

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Red Room

Monday 7

11:00 Juan Carlos Felipe Navarro (BGSMath - Universitat Politècnica de Catalunya): *Liouville type results for fractional Schrödinger operators in 1D*

11:25 Tomás Sanz-Perela (Universitat Politècnica de Catalunya): *Integro-differential Allen-Cahn equations: the saddle-shaped solution*

11:50 Jorge Cayama (Universidad del País Vasco): *A pseudo-spectral method for the fractional Laplacian on R*

12:15 Marta de León Contreras (Universidad Autónoma de Madrid): *Weighted mixed-norm Sobolev estimates for solutions of some parabolic equations.*

16:35 José Manuel Uzal (Universidade de Santiago de Compostela): *Periodic solutions of state-dependent impulsive differential equations*

17:00 Víctor Arnaiz (ICMAT): *The KAM theorem in the semiclassical limit*

17:25 Òscar Rodriguez (Universitat Politècnica de Catalunya): *Ejection-collision orbits in the RTBP*

17:50 Nada TASSI (University Mohammed 5. Rabat-Morroco): *Mathematical modeling and homogenization for nonlinear behavior of reinforced piezoelectric composites*

Tuesday 8

11:00 Florian Heinrichs (Ruhr-Universität Bochum / Universidad Autónoma de Madrid): *Testing for weak stationarity of locally stationary time series*

11:25 Andrea Trucchia (BCAM (Basque Center for Applied Mathematics) and UPV-EHU, Campus de Leioa): *Surrogate-based analysis of turbulence and fire-spotting in wild-land fire modeling*

11:50 Yassin BELKOURCHIA (ENSET, Mohammed V University, Rabat, Morocco): *Optimization procedure and application to location optimization of piezoelectric actuators and sensors for active vibration control*

12:15 Hssaine Boualam (FST of Settat, Morocco): *Dual Algorithms Based on the Proximal Bundle Method for Solving Convex Minimax Fractional Programs*

Wednesday 9

11:00 Andre Macedo (University of Reading): *The Hasse norm principle*

11:25 francesca gatti (Universitat Politecnica de Catalunya): *The elliptic Stark conjecture*

11:50 Daniel Gil Muñoz (Universitat Politècnica de Catalunya): *Hopf Galois Theory: Generalizing Galois Theory with Hopf Algebras*

12:15 Marta Salguero García (Universitat de Barcelona): *A computational approach to Hopf-Galois theory*

16:35 Nikita Simonov (Universidad Autunoma de Madrid): *Quantitative a Priori Estimates for Fast Diffusion Equations with Caffarelli-Kohn-Nirenberg weights. Harnack inequalities and Hölder continuity*

17:00 Javier Martínez Perales (Basque Center for Applied Mathematics): *Sobolev-Poincaré inequalities for $p < 1$*

17:25 María Ángeles García-Ferrero (ICMAT): *Solutions to PDE with prescribed properties*

17:50 Stefano Buccheri (Sapienza Università di Roma): *Gradient behaviour for large solutions to semilinear elliptic problems*

Grey Room 1

Monday 7

11:00 Daniel Wysocki (University of Warsaw): *Classification of three-dimensional real coboundary Lie bialgebras*

11:25 Alessandro Malusà (QGM – Aarhus University): *Higgs bundles, flat connections, and quantum operators for Chern-Simons theory*

11:50 Ángel González-Prieto (Universidad Complutense de Madrid): *Field theory and quantisation of Hodge structures*

12:15 Lucía Martín Merchán (Universidad Complutense de Madrid): *Spin(7) structures from an spinorial viewpoint*

16:35 Juan de Dios Diaz-Ramírez (Universidad de Cádiz): *Characterizing proportionally modular affine semigroups*

17:00 XUAN KIEN Phung (IRMA-University of Strasbourg, France): *Siegel's theorem for integral points on curves*

17:25 Eduard BALZIN (Ecole Polytechnique): *Families of categories in geometry, algebra, and homotopy theory*

17:50 Julia Ramos González (Universiteit Antwerpen): *Grothendieck categories as a bicategory of fractions of linear sites*

Tuesday 8

11:00 Josue Tonelli Cueto (Technische Universität Berlin): *Computing the homology of closed semialgebraic sets*

11:25 Julio Aroca (ICMAT): *The diameter of some multicurve-based graphs*

11:50 Rodrigo Codorniu (Université de Nice-Sophia Antipolis): *The fundamental group scheme of certain fibered varieties*

12:15 Emily Quintero (Universidad de Alcalá): *Computing symmetries of ruled rational surfaces.*

Wednesday 9

11:00 EL HASSAN BEN-AHMED (Ibn Zohr University, Faculty of Sciences, Agadir, Morocco): *A stable numerical meshless method for modelling water flow in porous media*

11:25 Mauricio Misquero (Universidad de Granada): *Resonance tongues in the linear Sitnikov equation*

11:50 Daniel Eceizabarrena (BCAM - Basque Center for Applied Mathematics): *The Talbot effect and fractal aspects of Riemann's non-differentiable function*

12:15 Alexandru Iosif (Otto von Guericke Universitiy of Magdeburg): *Mass action networks with the isolation property*

16:35 Marc Calvo Schwarzwälder (Centre de Recerca Matemàtica): *Thermal transport equations and boundary conditions at the nanoscale*

17:00 Ismael Rodríguez-Cal (Technical University of Madrid (UPM)-Tecnologías Avanzadas Inspiralia): *NASAL-FLOW: an automatised fluid dynamics analysis of airflow in the human upper airways*

Multimedia Room

Wednesday 9

11:00 Rodrigo Mariño Villar (Universidade de Santiago de Compostela): *Weakly-Einstein Riemannian Manifolds*

11:25 Paz Albares Vicente (Universidad de Salamanca): *Integrability, the singular manifold and soliton solutions for Nonlinear Schrödinger Equations*

11:50 Eddygledson Souza Gama (Universidade Federal do Ceará, Universidad de Granada): *Translating Solitons of the Mean Curvature Flow Asymptotic to Hyperplane in $\mathbb{R}^{n+1}$.*

12:15 Jaime Santos Rodríguez (Universidad Autónoma de Madrid): *Curvature, measures and isometries.*

16:35 Ana Navarro Quiles (Universitat Politècnica de València (UPV)): *Random Variable Transformation technique to solve differential equations with uncertainty*

17:00 Ihsane SALLEH (ENSET, Rabat-Morocco): *Distribution functions of nonlinear stochastic differential systems with uncertain parameter*

17:25 Luca Maria Giordano (Universitat Autònoma de Barcelona / Università degli Studi di Milano): *Weak convergence of the solutions of some fractional spde's*