

Monday morning		
Aula Magna	Algebraic geometry	
11:30	Jorge Rodríguez Pérez	Inflection points of algebraic surfaces, a modern approach to the work of George Salmon
12:00	Gonzalo Rodríguez Pajares	Tropical ideals
12:30	María de Leyva Elola-Olaso	Stratification of the moduli space of plane branches with a single characteristic exponent
13:00	Miguel Valderrama de las Heras	An introduction to the space of arcs
Sala de grados I	Sheaves and cohomology	
11:30	Alejandro Majadas Moure	Axioms for the Lefschetz number on sheaves
12:00	Alfonso Márquez Martínez	Sheaf cohomology and applications
12:30	Ángel Méndez	Cohomology Lusternik-Schnirelmann Category
13:00	Gabriel Abánades	The Abstract De Rham Theorem for Sheaf Co-homology. Some Examples.
IMUVa	Computational methods	
11:30	Isabel María Moreno Cuadrado	Computer Science Through the Frequency Spectrum
12:00	Jon Ander Alonso	Computational study of neural networks using topological invariants
12:30	León Miguel Ávila León	Neural Network-Enhanced Finite Volume Schemes for Hyperbolic System of Conservation Laws in Multiple Dimensions
13:00	Mencía Reborido	Opinion formation under the presence of ignorance in social groups

Monday afternoon		
Aula Magna	Topological vector spaces and tensor products	
15:30	Juan Guerrero-Viu	Projective tensor products where every element is norm-attaining
16:00	Mario P. Maletzki	Algebraic dimension of completely metrizable topological vector spaces
Sala de grados I	Geometric group theory	
15:30	Marina Salamero	Complexes of groups
16:00	Joren Matthys	Residual Finiteness Growth
IMUVa	Applications of Algebra	
15:30	Rubén Rodríguez Ballesteros	On QMDS codes
16:00	Tereso del Río Almajano	Optimising Algebraic Algorithms using Artificial Intelligence

Tuesday morning		
Aula Magna	Inequalities and convex analysis	
11:30	Lidia Gordo Malagón	On L_p Brunn-Minkowski type inequalities for a general class of functionals
12:00	Achraf Ben Said Abid	New optimal estimates in Hardy-type inequalities
12:30	Jaime Arto Alseda	Convex bodies associated to log-concave functions
Sala de grados I	Statistics	
11:30	Javier Fernández Serrano	Mode-based estimation of the center of symmetry
12:00	Juan Manuel Millán Fanconi	Step-Stress Tests for Highly Reliable Devices
12:30	Lucía Bautista	Imperfect maintenance and parameter estimation in a Wiener process
IMUVa	Mathematics Education I	
11:30	Gregorio Arjona-Aranda	A literature review on how to develop computational thinking from a geometrical perspective using unplugged activities with games
12:00	Iván Martín-Colomo	Navigating the turbulent waters of math anxiety: A meta-analysis of interventions for pre-service teachers
12:30	Rocío Plazas Naranjo	Tasks of defining polygons for prospective teachers

Tuesday afternoon		
Aula Magna	Mathematics Education II	
15:00	Espina, E.	Affective-cognitive profiles in students with dyscalculia: a comparative analysis
15:30	Mercedes Carpintero Gómez	Limiting Beliefs in Mathematics Education among Primary School Students: A Creative Systematic Review and construction of the concept
Sala de grados I	Applications of operator theory	
15:00	Beatriz Marín Gimeno	Alexandrov-Fenchel inequality
15:30	Jesús Llorente	Dynamical behavior of the Takagi function
IMUVa	Differentiable surfaces	
15:00	Claudia Muñoz	A characterization of extremal punctured hyperbolic surfaces
15:30	José S. Santiago	An abstract approach to differential geometry: the compatibility equations

Wednesday morning		
Aula Magna	Homotopy and homology	
11:00	Alejandro Moreno Becerra	Shub’s conjecture
11:30	Bruno Valverde Morales	The Conley Index for flows
12:00	Javier Villar Ortega	Synthetic Homotopy Theory in Homotopy Type Theory
12:30	Pablo Regalado García	Alexander Polynomial and <i>Knot Floer</i> Homology using grid diagrams
Sala de grados I	P-adics - Combinatorics	
11:00	Luis Crespo	The p -adic Jaynes-Cummings model
11:30	Javier Polo Noche	The construction of the p -adic L -function of a modular form
12:00	David Alcántara	On the convex hull of integer points above the hyperbola
12:30	Emiliano Liwski	Solvable and Nilpotent Matroids: Realizability and Irreducible Decomposition of Their Associated Varieties
IMUVa	Algebra and geometry	
11:00	Álvaro Pereira-Albert	Dealing with non-principal locus in automated reasoning in geometry
11:30	Álvaro Serrano Holgado	The module of relations of a degree 4 polynomial
12:00	Andrés Pérez-Rodríguez	The Nilradical of an Evolution Algebra
12:30	Diego Alba Alonso	Finite potent endomorphisms and generalized inverses

Wednesday afternoon		
Aula Magna	Geometry and Physics	
15:00	Fernán González-Ibáñez	Basketball vs. Watermelon: From Which One Will The Ant Escape First?
15:30	Ignacio Megía Pérez	Arnold-Liouville theorem and the geometry of toric regular Lagrangian fibrations
Sala de grados I	Dynamical systems	
15:00	Irene Sanz Serrano	Bayesian filtering and the Laplace approximation
15:30	Miguel Martínez González	Linearization and stability in fluid dynamics
IMUVa	Topics in operator theory	
15:00	Ester Beatriz	An energy formula for fully nonlinear degenerate parabolic equations in one spatial dimension
15:30	Julia Sánchez Loscertales	Dvoretzky’s theorem

Thursday morning		
Aula Magna	Operator theory	
11:00	Esteban Martínez Vañó	Everything you always wanted to know about Hahn-Banach theorem (but were afraid to prove)
11:30	Alejandro Marcos Baños	Unconditional and Schauder decompositions in quasi-Banach spaces
12:00	Helena del Río Fernández	On a new notion of norm-attaining operators on Banach spaces
12:30	Miguel Ángel Ruiz Risueño	Quasicomplemented subspaces in Banach spaces
Sala de grados I	Algebra in operators	
11:00	Adrián Santos Quiles	Hasse-Schmidt differential ideals and regularity of finite type algebras over a field
11:30	Laura García Rastrojo	Integrability of Hasse-Schmidt derivations in positive characteristic
12:00	Jorge Pérez García	Spotting the Difference in Operator Algebras
12:30	Antonio Jesús Ortega Ravelo	Numerical Range: Applications in C*-Algebra, Hilbert Spaces, and Quantum Information Theory
IMUVa	Algebraic topology	
11:00	Enrique Aycart-Maldonado	Understanding Topological Quantum Field Theories
11:30	Javier Díaz Cabrera	Derived categories and the Ext functors
12:00	Jesús Gacías Franco	Euler Calculus and Euler Transforms: Applications to Data Analysis and Origami
12:30	Pablo Munarriz Senosiain	Encoding Simplicial Complexes in Quantum Computers