



Universidad
Carlos III de Madrid



September 24-26, 2018

12th Workshop of Young Researchers in Mathematics

LUNES 24:

10:00-10:30: Registro

10:30-10:45: Presentación

10:45-11:45: Ignacio Luengo: *Post-quantum cryptography with polynomials*

11:45-12:15: Café

12:15-12:45: Ángel González: *How to use a quantum sledgehammer to crack a topological nut (and to get something in return)*

12:45-13:15: Miguel Monsalve: *Power-regularity and spectral properties of Bishop-type operators*

13:15-13:45: Carla Hernando: *A class of companion pencils*

15:30-16:30: Eduardo Colorado: *Coupled systems of PDEs related to the fifth state of matter*

16:30-17:00: Francisco Mengual: *Degraded mixing solutions for the Muskat problem*

17:00-17:30: Café

17:30-18:00: Alejandro Ortega: *The Brezis-Nirenberg problem for the fractional Laplacian with mixed Dirichlet-Neumann boundary conditions*

18:00-18:30: Eduardo Muñoz: *Periodic solutions in a non spatial periodic Lotka-Volterra predator-prey model.*

MARTES 25:

10:00-11:00: Ciro Ciliberto: Enumeration in geometry

11:00-11:45: Christoph Schulze: Cones of non-negative Polynomials

11:45-12:15: Café

12:15-12:45: Mauro Sanchiz: *Espacios L_p y $L_{p(\cdot)}$ de exponente variable*

12:45-13:15: Alejandro Mas: *Unitary operators in Hilbert spaces of analytic functions*

MARTES 25:

13:15-13:45: Marta de León-Contreras: *Hölder-Zygmund spaces associated to Schrödinger operators and some applications*

13:45-14:00: Presentación Red Doctorados Matemáticas UCM

15:30-16:15: Carlos Palazuelos: *Quantum entanglement in nonlocal games*

16:15-16:45: Elena Martínez: *Sierpinski-Zygmund functions: Historical overview and recent findings*

16:45-17:15: Daniel Rodríguez: *Polarization constants in normed spaces*

17:15-17:45: Café

17:45-18:15: Patricio Almirón: *Around Tjurina number: A new Hope*

18:15-18:45: Yanelly Zaldívar: *Higher order recurrences and row sequences of Hermite-Padé approximation*

MIÉRCOLES 26:

10:00-11:00: Carlos Mora: *Mathematical Models in Material Science*

11:00-11:45: Daniel Macías: *The conjecture of Birch and Swinnerton-Dyer (and some equivariant refinements)*

11:45-12:15: Café

12:15-12:45: Víctor Pérez Valdés: *Duality and normality on topological groups*

12:45-13:15: Rosalío Reyes: *Mathematical properties on the hyperbolicity of interval graphs*

13:15-13:45: Carlos Mudarra: *A Whitney Extension Theorem for convex functions*

Organizadores: Enrique Arrondo (UCM), Elena Castilla (UCM), Pedro Chocano (UCM), Alejandro Melle Hernández (UCM), José Manuel Rodríguez García (UC3M), Dragan Vukotic (UAM).

Con la colaboración del Instituto de Matemática Interdisciplinar (IMI).

Asistencia gratuita. Contacto: master.matematicas@mat.ucm.es

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