

6th Workshop of Young Researchers in Mathematics

September 19-21, 2012



Wednesday, September 19

9:00 Registration

9:30 Opening

10:00 Juan F. Padial (UPM), *On a model arising in the nuclear fusion by magnetic confinement in the Stellarator devices: existence of solutions and a numerical approach*

11:00 Coffee break

11:30 Anh Dao Nguyen (François Rabelais University), *Isolated initial singularities for the viscous Hamilton-Jacobi equation*

12:00 Moisés Soto Bajo (UAM), *Introduction to Shift-Invariant Spaces Theory*

12:30 Juan Luis Ródenas Pedregosa (UCM), *Some variational principles and applications to the Geometry of Banach spaces*

13:00 Óscar Domínguez Bonilla (UCM), *Approximation spaces*

Lunch

15:30 Antonio Suárez (Universidad de Sevilla), *On some models arising in angiogenesis: a crucial step in tumor growth*

16:00 David González de la Aleja Gallego (UCM), *Dinámica de ecuaciones difusivas de tipo convectivo-adventivo*

16:30 Javier Pérez Álvaro (UC3M), *Sensitivity Problems for Fiedler Matrices*

17:00 Coffee break

17:30 David Torres Teigell (UAM), *Non-homeomorphic Galois conjugate surfaces*

18:00 Luis Ángel Calvo Pascual (UAM), *Bundles over Klein surfaces*

Thursday, September 20

09:30 Aniceto Murillo (Universidad de Granada)

10:30 Hugo Bello Gutiérrez (UCM), *Purely topological construction of the Caratheodory's prime end theory*

11:00 Coffee break

11:30 Héctor Barge Yáñez (UCM), *Topological Methods in Population Dynamics*

12:00 Roger Casals (UCM), *Contact Blow-Up*

12:30 Marta Farré Puiggalí (UCM), *Hamiltonian formulation of the Yang-Mills equations*

13:00 Leire Gorrochategui Gregorio (UCM), *Problems around complements of plane curves*

Lunch

15:30 Pedro Tradacete (UC3M), *Arithmetic means and convex sets in Banach spaces*

16:00 María Francisca Pérez Valero (UC3M), *On Fourier Series of Jacobi-Sobolev Orthogonal Polynomials*

16:30 Leonardo Ferro (UC3M), *Lie-Jordan Banach algebras and quantum reduction*

17:00 Coffee break

17:30 Beatriz Pascual Escudero (UAM), *Trivialization of analytic map germs for the resolution of singularities*

18:00 Michael Ernesto López Lehmann (UCM), *Variable exponent Lebesgue spaces and modulars*

Friday, September 21

09:30 Jesús Bastero (Universidad de Zaragoza), *Hyperplane sections of convex bodies, variance and isoperimetry*

10:30 Andrea Cadarso Rebolledo (UCM), *Formalizing the existence of entanglement in a quantum spin chain via Matrix Product States in new physical settings*

11:00 Coffee break

11:30 Fábio Sílvio José de Carvalho (UCM), *Variable Models for prediction and adjust of multivariate data*

12:00 Juan Martín Álvaro (UCM), *Resultados clásicos y actuales sobre los espacios $C(K)$*

12:30 Pablo Jiménez Rodríguez (UCM), *Lineability and spaceability in function spaces*

The Workshop will take place at the room Miguel de Guzmán, School of Mathematics, Universidad Complutense de Madrid



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