

Workshop of Young Researchers in Mathematics

September 22-24, 2010



PROGRAMME

Tuesday, September 21

19:00: Registration

Wednesday, September 22

09:00-09:30 Registration

09:30-10:00 Opening

10:00 Francisco Marcellán (UC3M), "Orthogonal Polynomials: From the theory to their applications".

11:00 Rodrigo Parra (University of Michigan), "Equidistribution to the Green current".

11:30 Coffee Break

12:00 Fernando de Terán (UC3M), "The solution of the equation $XA+AX^T=0$ and its application to the theory of orbits".

12:30 Javier Gómez Serrano (UAM), "The Prandtl equation: past, present and future".

13:00 Kenier Castillo (UC3M), "Perturbation of Hankel and Toeplitz matrices. Orthogonal polynomials and Applications".

13:30 Daniel de la Barrera (UCM), "Locally quasi-convex group topologies on the group of the integers".

LUNCH

15:30 Ireneo Peral (UAM), "Some experiences in Partial Differential Equations".

16:30 Pierre Bousquet (Université Aix-Marseille 1), "A problem in the calculus of variations".

17:00 Coffee Break

17:30 Cristina Brändle (UC3M), "Non-local equations: a probabilistic viewpoint".

18:00 Ana Soledad Meroño (UCM), "Samuel's Realcompactification".

18:30 Jezabel Curbelo (UAM), "A convection problem with temperature dependent viscosity and $SO(2)$ symmetry".

Thursday, September 23

09:30 Herwig Hauser (Universität Vienna), "Singularities of Algebraic Varieties".

10:30 Mario García-Fernández (Aarhus University), "Solutions of the Strominger System via Stable Bundles on Calabi-Yau Threefolds".

11:00 Coffee Break

11:30 Ángela Benito (UAM), "On the resolution of singularities problem".

12:00 Francisco Javier de Vega (UCM), "New aspects in factoring primes".

12:30 Junior Michel (UC3M), "Gromov hyperbolicity in cartesian product graphs".

13:00 Alicia Tocino (UCM), "Vectors bundles and grassmanians".

LUNCH

15:30 Ivan Smith (Cambridge University), "Lagrangian intersection problems".

16:30 Katrin Faessler (University of Bern), "Projection theorems in the Heisenberg group".

17:00 Coffee Break

17:30 Ignacio Luján (UCM), "Homogeneous structures on hyper-Kähler manifolds".

18:00 José Ángel Capitán (UC3M), "Mathematical modelling of robust ecological communities".

18:30 José Alberto Iglesias (UCM), "An introduction to Morse theory from a modern standpoint"

Friday, September 24

09:30 Juan P. Bes (Bowling Green State University), "Mathematical modeling and simulation for the diffusion of an epidemic of classical swine fever within and between farms"

10:30 André Gama Oliveira (Universidade de Trás-os-Montes e Alto Douro), "Character varieties and moduli of Higgs bundles".

11:00 Coffee Break

11:30 Óscar Madiedo (UCM), "Nonsmooth Analysis and Global Invertibility Theorem".

12:00 Juan Manuel Pérez-Pardo (UC3M), "Quadratic Forms and General Self-adjoint extensions of the Laplace-Beltrami Operator".

12:30 Álvaro Sánchez (UCM), "Topologies on the fundamental group and related groups".

13:00 Diego de Pereda (UCM), "Mathematical modeling and simulation for the diffusion of an epidemic of classical swine fever within and between farms".

The Workshop will take place at the room Miguel de Guzmán, School of Mathematics, Universidad Complutense de Madrid, on 22-24 September, 2010, with morning and afternoon sessions (09:30-13:30 and 15:30-19:00).

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<http://www.mat.ucm.es/vdrmat/workshop2010.htm>

