

# 9<sup>th</sup> Workshop of Young Researchers in Mathematics

September 21-23, 2015



Universidad Complutense  
de Madrid



Instituto de  
Matemática  
Interdisciplinar



## Monday, September 21

9:30 Registration

10:00 Opening

10:30 Richard Aron (Kent State University): Homomorphisms on  $H^*(D)$  and beyond

11:30 Coffee Break

12:00 Alba Segurado (Universidad Complutense de Madrid): Limiting logarithmic interpolation.

12:40 Irina Arévalo (Universidad Autónoma de Madrid): Mixed norm spaces of analytic functions.

13:20 Marcos de la Oliva (Universidad Autónoma de Madrid): Laminates meet Condition (N).

13:50 Lunch

15:30 María López-Fernández (ETH Zürich): Towards time adaptive for convolution equations arising in wave problems.

16:10 Eduardo Fernández (Universidad Complutense de Madrid): Symmetries and Differential Equations.

16:40 Break

17:10 Carlos Buelga (Universidad Complutense de Madrid): Factorization of operators in Banach lattices.

17:40 Antonio Rubio (Universidad Complutense de Madrid): Invariant hypersurfaces by endomorphisms.

18:10 Sergio Fernández (Universidad Complutense de Madrid): Dynamics of a competition model when diffusion goes to zero.

18:40 Ending

## Tuesday, September 22

9:30 Piermarco Cannarsa (Università di Roma): Control of certain classes of hypoelliptic diffusions.

10:30 Nada El Berdan (Université de Poitiers): Regularity of solutions and their gradients for semi-linear elliptic problem.

11:10 Coffee Break

11:40 Ahmad Makki (Université de Poitiers): Study of strongly anisotropic Cahn-Hilliard and Allen-Cahn models.

12:20 Angélica Benito (Universidad Autónoma de Madrid): Resolution of Singularities and Applications.

12:50 Carlos Abad (Universidad Autónoma de Madrid): On the behavior of the multiplicity on algebraic varieties and Rees algebras.

13:20 María Ramírez-Nicolás (Universidad Complutense de Madrid): Analysis of dynamic processes on Mars.

13:50 Lunch

15:30 Ana Portilla (Saint Louis University): Gromov hyperbolicity in Mycielskian Graphs.

16:30 Verónica Hernández (Universidad Carlos III de Madrid): Minimum and maximum and hyperbolicity constant in graphs.

17:00 Break

17:30 Amauris de la Cruz (Universidad Carlos III de Madrid): On hyperbolicity in the Cartesian Sum of Graphs.

18:00 Álvaro de Vicente-Retortillo (Universidad Complutense de Madrid): Characterization of solar radiation on Mars with the Monte-Carlo method.

18:30 Ending

## Wednesday, September 23

9:30 Javier Fresán (ETH Zürich): Gamma values: regular and irregular.

10:30 Cecilia Lancien (Université de Lyon): When Alice & Bob meet Banach.

11:10 Coffee Break

11:40 Ignacio Pascual (Universidad Carlos III de Madrid): Modeling paradigm shifts in cultural evolution.

12:10 Juan Carlos García (Universidad Carlos III de Madrid): Christoffel transformations of matrix of measures supported in the real line.

12:40 Luis Miguel Anguas (Universidad Carlos III de Madrid): Eigenvalue Condition Numbers of Polynomial Eigenvalue Problems under Möbius Transformations.

13:10 Fernando Uedó (Universidad Carlos III de Madrid): Amenability aspects around Roe  $C^*$ -algebras.

14:10 Closure

The Workshop will take place at the room S-106, School of Mathematics,  
Universidad Complutense de Madrid

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<http://www.mat.ucm.es/imi/youngresearchers15/index.php>

