



4º CONGRESO DE JÓVENES  
INVESTIGADORES  
Real Sociedad Matemática Española  
Universitat de València,  
del 4 al 8 de Septiembre de 2017



## S5: EDPs y Aplicaciones (Aula M-1.4)

### Martes 5 de septiembre

11:30- 12:00 **Juan Calvo Yagüe**, Long time behavior for some continuous polymerization models  
12:00-12:30 **Andrea Tellini**, Enhancement of Fisher-KPP propagation through lines and strips of fast diffusion  
12:30-13:00 **Luis Andrés Urrutia Matarin**, Kinetic description of fractional diffusion equations modeling chemotaxis  
13:00-13:30 **Rafael Granero Belinchón**, On the Rayleigh-Taylor instability

16:30-17:00 **Iván Moyano\***, On the controllability of some collisional kinetic equations  
17:00-17:30 **Salvador López**, The principal eigenvalue for singular and homogeneous elliptic equations and its role in optimal existence results  
17:30-18:00 **Marta Latorre Balado**, Un problema de evolución con el operador 1-laplaciano

### Miércoles 6 de septiembre

11:30- 12:00 **Begoña Barrios Barrera**, Monotonicity and symmetric results for some nonlocal elliptic problems in half-spaces  
12:00-12:30 **Sauli Lindberg**, Conservation of the magnetic mean square potential in 2D ideal MHD  
12:30-13:00 **Diana Stan**, Asymptotic behavior for fractional diffusion-convection equations  
13:00-13:30 **Rafael López Soriano\***, Existence and compactness for the mean field equation with sign changing potentials

16:30-17:00 **Pablo Álvarez Caudevilla**, Optimal regularity for a fourth-order thin film equation in  $\mathbb{R}^N$   
17:00-17:30 **Razvan Gabriel Iagar**, A survey on finite time extinction for a class of singular diffusion equations  
17:30-18:00 **Martina Magliocca**, Local and global time decay for parabolic equations with super linear first order terms

### Jueves 7 de septiembre

11:30-12:00 **Tania Pernas Castaño**, El problema de Muskat no-homogéneo  
12:00-12:30 **Eduardo García Juárez**, Recent results on 2D density patches for inhomogeneous Navier-Stokes  
12:30-13:00 **Flavia Smarrazzo**, Weakly coercive parabolic equations with measures as initial data  
13:00-13:30 **Xavier Fernández Real**, The obstacle problem for the fractional Laplacian with critical drift

16:30-17:00 **Nikita Simonov**, A Priori Estimates for Weighted Fast Diffusion Equations. Harnack inequalities and Hölder regularity.  
17:00-17:30 **Luigi Montoro**, Moving plane method and qualitative properties of solutions for nonlocal problems  
17:30-18:00 **Matteo Cozzi**, Regularity results for minimizers and solutions of nonlocal problems via fractional De Giorgi classes

### Viernes 8 de septiembre

11:00- 11:30 **Azahara de la Torre**, Gluing methods for the fractional Yamabe problema with isolated singularities.  
11:30- 12:00 **Daniel Cao Labora**, Hacia el cálculo fraccionario desde la mecánica de fluidos y las EDP. Nuevos métodos para resolver ecuaciones integrales fraccionarias  
12:00-12:30 **Félix del Teso**, Theoretical and numerical aspects for nonlocal equations of porous medium type

\*Por confirmar