

# Nonlinear Diffusion Problems

*dedicated to Maria Assunta Pozio*

Program at glance (August 26, 2019)

<http://www1.mat.uniroma1.it/ricerca/convegni/2019/ndp2019/>

**Wednesday, September 11<sup>th</sup>.** Afternoon

*Chairman:* Lucio BOCCARDO

14.30–15.15 *Commemoration of Maria Assunta Pozio*

15.15–16.00 Michiel BERTSCH (Università di Roma Tor Vergata & IAC-CNR, Italy)

*Discontinuous viscosity solutions of first order Hamilton–Jacobi equations*

16.00–16.30 *coffee break*

16.30–17.15 Jesus Ildefonso DIAZ (Universidad Complutense de Madrid, Spain)

*Beyond the unique continuation: “flat solutions” for reactive slow diffusions and the infinite and confinement singular potentials for the Schrödinger equation*

17.15–18.00 Maria Michaela PORZIO (Sapienza, Università di Roma, Italy)

*Time behavior of the solutions to a class of diffusion problems*

**Thursday, September 12<sup>th</sup>.** Morning

*Chairwoman:* Filomena PACELLA

09.15–10.00 Robert KERSNER (University of Pécs, Hungary)

*Periodic stationary solutions of some reaction-diffusion systems*

10.00–10.45 Masayasu MIMURA (Hiroshima University, Hiroshima, Japan)

*Nonlinear diffusion modelling stay (grow)-or-migrate dichotomy*

10.45–11.15 *coffee break*

11.15–12.00 Elena BERETTA (Politecnico di Milano, Italy & NYU, Abu Dhabi, UAE)

*On some inverse boundary value problems related to the monodomain model of cardiac electrophysiology*

12.00–12.45 Pierangelo MARCATI (GSSI – Gran Sasso Science Institute, L’Aquila, Italy)

*Splash singularities for 2-D incompressible viscoelastic fluids of Oldroyd-B type*

**Thursday, September 12<sup>th</sup>.** Afternoon

*Chairwoman:* Adriana GARRONI

14.30–15.15 Thierry CAZENAVE (Sorbonne Université, France)

*Some stability properties for minimal solutions of  $-\Delta u = \lambda g(u)$*

15.15–16.00 Radjesvarane ALEXANDRE (Arts et Métiers Paris Tech, France)

*...to be announced...*

16.00–16.30 *coffee break*

16.30–17.15 Mimmo IANNELLI (Università di Trento, Italy)

*Vector-borne epidemics through a plantation*

17.15–18.00 Hiroshi MATANO (Meiji University, Tokyo, Japan)

*Propagation of bistable fronts through a perforated wall: Part I*

20.00–22.30 *...social dinner...*

**Friday, September 13<sup>rd</sup>.** Morning

*Chairwoman:* Isabeau BIRINDELLI

09.15–10.00 Henri BERESTYCKI (PSL University Paris & CNRS, France)

*Propagation of bistable fronts through a perforated wall: Part II*

10.00–10.45 Jesus HERNANDEZ (Universidad Autónoma de Madrid, Spain)

*Positive solutions for a nonlinear elliptic problem arising in chemical reactions*

10.45–11.15 *coffee break*

11.15–12.00 Fabio PUNZO (Politecnico di Milano, Italy)

*The Poisson equation on Riemannian manifolds*

12.00–12.45 Catherine BUNDLE (University of Basel, Switzerland),

*Positive solutions of semilinear elliptic problems with a Hardy potential*

12.45–13.00 *Conclusions*