

# Program of the 8th Euro-Maghrebian workshop on Evolution Equations

Dipartimento di Matematica e Fisica “Ennio De Giorgi” – 11–15 June, 2012

**Scientific Committee:** Aissa Aibeche (Sétif), Wolfgang Arendt (Ulm), Mohammad Ali Jendoubi (Bizerte), Alessandra Lunardi (Parma), Lahcen Maniar (Marrakech), José Mazon (Valencia), El Maati Ouhabaz (Bordeaux), Roland Schnaubelt (Karlsruhe)

**Sponsors:** Università del Salento, Karlsruhe Institute of Technology, GNAMPA-INdAM, Monte dei Paschi di Siena

## Monday 11th June

9.30	<b>Opening</b>	
10.00-11.00	F. Alabau-Boussouira	Controllability of scalar wave-type equations and of coupled systems of PDEs by a reduced number of controls
11.00-12.00	V. Caselles	Variational Models in Image Processing
12.00-13.00	A. Rhandi	Invariant measures: Existence, Uniqueness and global properties
13.00-15.00	<b>Lunch</b>	
15.00-16.00	L. Lorenzi	An overview on nonautonomous Kolmogorov equations
16.00-16.30	<b>Coffee break</b>	
16.30-17.00	L. Angiuli	Summability improving in nonautonomous Kolmogorov equations
17.00-17.30	S. Fackler	Regularity of Semigroups via the Asymptotic Behaviour at Zero

## Tuesday 12th June

9.30-10.30	F. Alabau-Boussouira	Controllability of scalar wave-type equations and of coupled systems of PDEs by a reduced number of controls
10.30-11.30	V. Caselles	Variational Models in Image Processing
11.30-12.00	<b>Coffee break</b>	
12.00-13.00	J. Mazon	On a nonlinear flux-limited equation arising in the transport of morphogens
13.00-15.00	<b>Lunch</b>	
15.00-16.00	R. Chill	Dirichlet and Neumann boundary conditions for the $p$ -Laplace operator: What is in between?
16.00-16.30	<b>Coffee break</b>	
16.30-17.00	R. Manzo	Optimization of traffic flows using a fluid dynamic model
17.00-17.30	M. El Azzouzi	Approximate Positive Controllability for Retarded Functional Equations
17.30-18.00	M. Moussaoui	Analysis of model problem in mathematical biology

## Wednesday 13th June

9.30-10.30	V. Caselles	Variational Models in Image Processing
10.30-11.30	A. Rhandi	Invariant measures: Existence, Uniqueness and global properties
11.30-12.00	<b>Coffee break</b>	
12.00-13.00	S. Nicaise	Uniformly exponentially or polynomially stable approximations for second-order evolution equations
13.00-15.00	<b>Lunch</b>	
15.00-16.00	S. Monniaux	The divergence theorem involving the pointwise non-tangential trace
16.00-16.30	<b>Coffee break</b>	
16.30-17.00	W. Dada	A new view at higher rank numerical ranges of Hilbert space operators
17.00-17.30	I. Derrardjia	Stability in nonlinear neutral differential equations with variable delays using fixed point theory
17.30-18.00	Ali Khalil Kamel	The maximum number of limit cycle of ordinary differential equations

### Thursday 14th June

9.30-10.30	F. Alabau-Boussouira	Controllability of scalar wave-type equations and of coupled systems of PDEs by a reduced number of controls
10.30-11.30	A. Rhandi	Invariant measures: Existence, Uniqueness and global properties
11.30-12.00	<b>Coffee break</b>	
12.00-13.00	J. Goldstein	Energy aspects of strongly damped wave equations
13.00-15.00	<b>Lunch</b>	
15.00-16.00	G. Ruiz Goldstein	The functional analysis behind global wellposedness for reaction-diffusion systems having boundary diffusion and bounded total mass but finite time blowup
16.00-16.30	<b>Coffee break</b>	
16.30-17.00	D. Addona	Shauder estimates for nonautonomous Ornstein-Uhlenbeck operator in spaces of continuous weighted functions
17.00-17.30	S. Mourou	Kernel Estimates for Generalized Ornstein-Uhlenbeck Operators

### Friday 15th June

9.00-10.00	E. Priola	Global Lipschitz regularizing effects for parabolic equations with singular coefficients
10.00-11.00	G. Galdi	On the Steady Motion of a Coupled System Solid-Liquid
11.00-11.30	<b>Coffee break</b>	
11.30-12.00	C. Spina	Elliptic operators with unbounded diffusion coefficients
12.00-12.30	M. Boukdir	Caracterisation d'un semigroupe polynomialement born en terme de la resolvante
hline 12.30-	<b>Lunch</b>	