

# WORKSHOP PROGRAM

## Numerical Methods for Evolution Equations

### Heraklion, Crete, September 23-24, 2016

#### Friday, September 23

9:15-9:30	<b>Opening</b>
	<b>Chairman: Vidar Thomée</b>
9:30-10:00	<b>Christian Lubich</b> (U. Tübingen) <i>A-stable time discretizations preserve maximal parabolic regularity.</i>
10:00-10:30	<b>Michel Crouzeix</b> (U. Rennes) <i>A matrix factorisation based on numerical radii.</i>
10:30-11:00	<b>Ricardo Nochetto</b> (U. Maryland) <i>Nematic liquid crystals with variable degree of orientation.</i>
<i>Coffee Break</i>	
	<b>Chairman: Patrick Joly</b>
11:30-12:00	<b>Stig Larsson</b> (Chalmers U. of Technology) <i>Quasi-optimality of Petrov-Galerkin discretizations of parabolic problems with random coefficients.</i>
12:00-12:30	<b>Assyr Abdulle</b> (EPFL Lausanne) <i>Numerical homogenization method for parabolic advection-diffusion multiscale problems with large compressible flows.</i>
12:30-13:00	<b>Angel Duran</b> (U. Valladolid) <i>On the use of cross-diffusion systems for image restoration problems.</i>
<i>Lunch Break</i>	
	<b>Chairman: Vassilios Dougalis</b>
14:30-15:00	<b>Patrick Joly</b> (INRIA) <i>An approach of aeroacoustics through the Goldstein model.</i>
15:00-15:30	<b>Emmanuil Georgoulis</b> (U. Leicester) <i>Space-time discontinuous Galerkin methods for evolution PDEs.</i>
15:30-16:00	<b>Balázs Kovács</b> (U. Tübingen) <i>Stable and convergent fully discrete interior-exterior coupling of Maxwell's equations.</i>
<i>Coffee Break</i>	
	<b>Chairman: Michel Crouzeix</b>
16:30-17:00	<b>Panagiotis Chatzipantelidis</b> (U. Crete ) <i>The virtual element method for nonlinear elliptic problems.</i>
17:00-17:30	<b>Konstantinos Chrysafinos</b> (Technical U. Athens ) <i>Error estimates for the approximation of the velocity tracking problem with bang-bang controls.</i>

## Saturday, September 24

	<b>Chairman: Charalambos Makridakis</b>
<b>9:30-10:00</b>	<b>Angela Kunoth</b> (U. Köln) <i>25+ years of wavelets for PDEs.</i>
<b>10:00-10:30</b>	<b>Sören Bartels</b> (U. Freiburg) <i>Approximation of self-avoiding inextensible curves.</i>
<b>10:30-11:00</b>	<b>Alexander Ostermann</b> (U. Innsbruck) <i>Splitting techniques in the presence of boundary conditions.</i>
<b>Coffee Break</b>	
	<b>Chairman: Christian Lubich</b>
<b>11:30-12:00</b>	<b>Tristan Pryer</b> (U. Reading) <i>Adaptive regularisation.</i>
<b>12:00-12:30</b>	<b>Mats Larson</b> (Umea U.) <i>Shape optimization using cut finite elements and evolution equations.</i>
<b>12:30-13:00</b>	<b>Maria López-Fernández</b> (U. Roma) <i>High order generalized convolution quadrature and some issues with adaptivity.</i>
<b>Lunch Break</b>	
	<b>Chairperson: Angela Kunoth</b>
<b>14:30-15:00</b>	<b>Chandrasekhar Venkataraman</b> (U. St Andrews) <i>Free boundaries on cell boundaries: Asymptotic limits of a model for receptor-ligand dynamics.</i>
<b>15:00-15:30</b>	<b>Georgios Zouraris</b> (U. Crete) <i>On the convergence of a linear implicit finite difference method for a nonlinear Schrödinger equation.</i>
<b>15:30-16:00</b>	<b>César Palencia</b> (U. Valladolid) <i>Some contributions to M. Crouzeix's conjecture.</i>
<b>Coffee Break</b>	
	<b>Chairman: Ricardo Nochetto</b>
<b>16:30-17:00</b>	<b>Georgios Akrivis</b> (U. Ioannina) <i>Stability of implicit and implicit-explicit multistep methods for nonlinear parabolic equations.</i>
<b>17:00-17:30</b>	<b>Dimitrios Antonopoulos</b> (U. Athens) <i>Galerkin methods for the Serre equations.</i>