

# WORKSHOP PROGRAM

## Numerical Methods for Evolution Equations

### Heraklion, Crete, September 21-22, 2012

Friday, September 21	
<b>9:15-9:30</b>	<b>Opening</b>
	<b>Chairman:</b> Vidar Thomée
<b>9:30-10:00</b>	<b>Christian Lubich</b> (U. Tübingen) <i>Stable FEM &amp; BEM &amp; leapfrog &amp; convolution quadrature coupling for the wave equation.</i>
<b>10:00-10:30</b>	<b>César Palencia</b> (U. Valladolid) <i>Operational calculus for Runge-Kutta quadrature operators.</i>
<b>10:30-11:00</b>	<b>Sören Bartels</b> (U. Freiburg) <i>Approximation of the elastic flow of inextensible curves and large bending isometries.</i>
<i>Coffee Break</i>	
	<b>Chairman:</b> Dietmar Kröner
<b>11:30-12:00</b>	<b>Stig Larsson</b> (Chalmers U. of Technology) <i>Weak convergence of finite element approximations of semilinear parabolic stochastic PDEs.</i>
<b>12:00-12:30</b>	<b>Raphaèle Herbin</b> (U. Marseille) <i>Staggered schemes for compressible flows.</i>
<b>12:30-13:00</b>	<b>Kunibert Siebert</b> (U. Stuttgart) <i>Adaptive space-time finite elements for parabolic problems.</i>
<i>Lunch Break</i>	
	<b>Chairman:</b> Patrick Joly
<b>14:30-15:00</b>	<b>Alexander Ostermann</b> (U. Innsbruck) <i>Strang splitting for Vlasov-type equations.</i>
<b>15:00-15:30</b>	<b>Emmanuil Georgoulis</b> (U. Leicester) <i>Discontinuous Galerkin methods for mass transfer through semi-permeable membranes.</i>
<b>15:30-16:00</b>	<b>Angela Kunoth</b> (U. Paderborn) <i>Adaptive approximations of control problems constrained by parametric parabolic PDEs</i>
<i>Coffee Break</i>	
	<b>Chairman:</b> Christian Lubich
<b>16:30-17:00</b>	<b>Maria López-Fernández</b> (U. Zürich) <i>Variable time-stepping for retarded potentials.</i>
<b>17:00-17:30</b>	<b>Irene Kyza</b> (FORTH) <i>Error control and adaptivity for Schrödinger equations.</i>
<b>17:30-18:00</b>	<b>Theodoros Katsaounis</b> (U. Crete) <i>A finite volume method for dispersive wave propagation.</i>

## Saturday, September 22

	<b>Chairman: Giuseppe Savaré</b>
<b>9:30-10:00</b>	<b>Patrick Joly</b> (INRIA) <i>Asymptotic modelling of electromagnetic wave propagation in co-axial cables.</i>
<b>10:00-10:30</b>	<b>Andreas Prohl</b> (U. Tübingen) <i>Space-time discretization of the stochastic incompressible Navier-Stokes equation.</i>
<b>10:30-11:00</b>	<b>Jacques Rappaz</b> (EPFL) <i>Finite element approximation of a nonlinear stationary Stokes problem arising in Glaciology.</i>
<i>Coffee Break</i>	
	<b>Chairman: Babis Makridakis</b>
<b>11:30-12:00</b>	<b>Dietmar Kröner</b> (U. Freiburg) <i>Phasefield models for flows with phase transition.</i>
<b>12:00-12:30</b>	<b>Dimitra Antonopoulou</b> (U. Crete) <i>A posteriori analysis for space-time, discontinuous in time, Galerkin approximations for parabolic equations in a variable domain.</i>
<b>12:30-13:00</b>	<b>Alexandre Ern</b> (U. Paris) <i>On stabilization for conservation laws.</i>
<i>Lunch Break</i>	
	<b>Chairman: Jacques Rappaz</b>
<b>14:30-15:00</b>	<b>Thierry Gallouet</b> (U. Marseille) <i>Convergence of gradient schemes for the Stefan problem.</i>
<b>15:00-15:30</b>	<b>Michael Plexousakis</b> (U. Crete) <i>Discontinuous Galerkin methods for the linear Schrödinger equation in non-cylindrical coordinates.</i>
<b>15:30-16:00</b>	<b>Georgios Akrivis</b> (U. Ioannina) <i>Implicit-explicit multistep methods for nonlinear parabolic equations.</i>
<i>Coffee Break</i>	
	<b>Chairman: César Palencia</b>
<b>16:30-17:00</b>	<b>Angel Duran</b> (U. Valladolid) <i>The Petviashvili method and its applications to generate solitary waves.</i>
<b>17:00-17:30</b>	<b>Dimitrios Mitsoudis</b> (FORTH) <i>Helmholtz equation in a 2D waveguide with artificial boundaries.</i>