

WORKSHOP PROGRAM

Numerical Methods for Evolution Equations

Heraklion, Crete, September 19-20, 2014

Friday, September 19

9:15-9:30	Opening
	Chairman: Vidar Thomée
9:30-10:00	Christian Lubich <i>On backward difference formulae for quasi-linear parabolic equations.</i>
10:00-10:30	Alexandre Ern <i>Discontinuous Galerkin method in time combined with a stabilized finite element method in space for linear first-order PDEs.</i>
10:30-11:00	Patrick Joly <i>Time domain analysis of an interface resonance phenomenon in electromagnetism.</i>
<i>Coffee Break</i>	
	Chairman: Vassilios Dougalis
11:30-12:00	Stig Larsson <i>Weak convergence analysis for finite element approximations of stochastic evolution PDEs.</i>
12:00-12:30	Ulrich Langer <i>Functional a posteriori error estimates for parabolic time-periodic problems.</i>
12:30-13:00	Kunibert Siebert <i>On the H^1 stability of the L_2 projection on adaptively refined grids.</i>
<i>Lunch Break</i>	
	Chairman: Patrick Joly
14:30-15:00	Charalambos Makridakis <i>Error control for wave equations.</i>
15:00-15:30	Emmanuil Georgoulis <i>Adaptivity and blow-up detection for semilinear parabolic problems based on rigorous a posteriori bounds.</i>
<i>Coffee Break</i>	
	Chairman: Georgios Akrivis
16:00-16:30	Georgios Zouraris <i>A numerical method for a nonlinear Fokker-Planck-Kolmogorov equation.</i>
16:30-17:00	Theodoros Katsaounis <i>A posteriori error control and adaptivity for the Schrödinger equation.</i>

Saturday, September 20

	Chairman: Charalambos Makridakis
9:30-10:00	Andreas Prohl <i>Numerical discretization of the stochastic cubic Schrödinger equation.</i>
10:00-10:30	Alexander Ostermann <i>Splitting based on approximate flows.</i>
10:30-11:00	Angela Kunoth <i>Multilevel preconditioning for isogeometric analysis.</i>
Coffee Break	
	Chairman: Stig Larsson
11:30-12:00	Omar Lakkis <i>A posteriori analysis and adaptivity in discontinuous Galerkin time-stepping methods.</i>
12:00-12:30	Konstantinos Chrysafinos <i>Analysis and approximations of the velocity tracking control problem for the 3D evolutionary Navier-Stokes equations.</i>
12:30-13:00	Vanessa Styles <i>Multi-material structural topology optimisation using phase field methods.</i>
Lunch Break	
	Chairman: Alexander Ostermann
14:30-15:00	Mats Larson <i>Stabilized cut finite element methods for evolution problems on surfaces.</i>
15:00-15:30	Panagiotis Chatzipantelidis <i>On the preservation of positivity in some finite element methods for the heat equation.</i>
Coffee Break	
	Chairman: Christian Lubich
16:00-16:30	Georgios Akrivis <i>Stability properties of implicit-explicit multistep methods for a class of nonlinear parabolic equations.</i>
16:30-17:00	Chrysoula Tsogka <i>Signal to Noise: Ratio analysis in passive correlation based imaging.</i>