

VDM60 - NONLINEAR EVOLUTION EQUATIONS AND LINEAR ALGEBRA
 SEPTEMBER 2–5, 2013
 CAGLIARI, ITALY

Monday 2	Tuesday 3	Wednesday 4	Thursday 5
8:30–9:00 REGISTRATION			
Chair: T. Aktosun	B. Prinari	S. Pennisi	S. Seatzu
9:00–10:00 OPENING	Antonio Degasperis (Plenary) Rational solitons of resonant wave interaction models	Tommaso Ruggeri (Plenary) Recent results in rational extended thermodynamics: macroscopic approach ...	Dario Bini (Plenary) Geometric means of matrices: analysis and algorithms
10:00–10:30 Martin Klaus (Plenary) Spectral problems associated with the matrix-valued AKNS equation	Paolo Santini Integrable multidimensional PDEs of hydrodynamic type: method of solution ...	Giovanni Frosali Nonlinear analysis of the two-mass-skate bicycle model	Lothar Reichel Rational Krylov methods and Gauss quadrature
10:30–11:00	Sara Lombardo Automorphic Lie Algebras	Luigi Barletti Signal-noise interaction in nonlinear optical fibers: a fluid-dynamic approach	Giuseppe Mastroianni Fredholm integral equations on the real semi-axis: a numerical method
11:00–11:20 COFFEE BREAK			
Chair: G. Biondini	P. Santini	G. Frosali	L. Reichel
11:20–11:50 Folkert Mueller-Hoissen Sylvester equations and integrable systems: a bidifferential calculus perspective	Matteo Sommacal Propagation and control of nanoscale magnetic-droplet solitons	Sebastiano Pennisi Extended Thermodynamics from the Lagrangian view-point	Marc Van Barel “Good” points for multivariate polynomial interpolation and approximation
11:50–12:20 Cornelia Schiebold Multiple-pole solutions of the Nonlinear Schroedinger equation	Marco Secondini Analytical approximations of the NLS equation: applications to ...	Todor Gramchev Global normal forms and spectral properties for perturbations of harmonic oscillators	Andre Ran Asymptotics of the smallest singular value of a class of Toeplitz-generated matrices ...
12:20–12:50 Annalisa Calini Integrable Flows for Starlike Curves in Centroaffine Space	Luisa Fermo Computation of relevant scattering data in the Zakharov-Shabat system	Salvatore Mignemi Analytical mechanics of a relativistic particle in a positional potential	Michele Benzi Decay properties for functions of matrices over C^* -algebras
12:50–16:00 LUNCH			
Chair: F. Mueller-Hoissen	A. Degasperis	M. Van Barel	D. Bini
16:00–16:30 Stella Piro-Vernier A Keller-Segel model in chemotaxis with blow-up solutions	Federica Vitale The IST for the defocusing NLS equation with nonzero boundary conditions	Stefano Serra Capizzano A symbol approach in IgA matrix analysis ...	Beatrice Meini On the solution of certain algebraic Riccati equations arising in fluid queues
16:30–17:00 Gino Biondini Scalar and vector nonlinear Schrodinger equations with nonzero boundary conditions	Giovanni Ortenzi Effects of inertia and stratification in incompressible ideal fluids ...	Claudio Estatico Regularized nonconvex minimization for image restoration	Dario Fasino A modularity-based spectral graph analysis
17:00–17:30	Francesco Borghero Some new results in Geometrical Optics	Silvia Noschese A modified TSVD method for discrete ill-posed problems	Caterina Fenu Fast ranking of nodes on digraphs
17:30–17:50 COFFEE BREAK			
Chair: F. Demontis		G. Rodriguez	
17:50–18:20 Antonio Moro Breaking mechanism from a vacuum point in the defocusing NLS equation	Poster Session	Paolo Pintus Modal analysis in non reciprocal wave-guide based on the finite element method	
18:20–18:50 Georgi Boyadzhiev Characteristic curves in modeling of the earth crust and upper mantle	Visit to the museum of wax anatomical models	Giuseppe Viglialoro A free boundary numerical method for solving an overdetermined elliptic problem	