

Geometric Structures in Integrable Systems

A conference in honour of Boris Konopelchenko's 70th birthday

19 - 21 September 2018, Lecce (Italy)



Conference Program

Wednesday 19 morning session

CHAIRPERSON: CALOGERO

09.00 – 09.10	Opening	
09.10 – 09.50	Zakharov	<i>Primitive potentials and bounded solutions of the KdV equation</i>
09.50 – 10.30	Rogers	<i>Multi-Component Integrable Ermakov-Painlevé and Toda-Painlevé Systems</i>
10.30 – 11.10	Kodama	<i>Rational solutions and solitons for the KP hierarchy</i>
11.10 – 11.30	Coffee Break	
11.30 – 12.00	Dubrovsy	<i>New periodic solutions of some two-dimensional integrable nonlinear equations via dbar-dressing method</i>
12.00 – 12.30	Ragnisco	<i>Novel results on Superintegrable Systems</i>
12.30 – 13.00	Bogdanov	<i>Dressing in the complex plane and geometry</i>
13.00 – 13.15	Martinez Alonso	<i>Dbar in the Sky</i>

Wednesday 19 afternoon session

CHAIRPERSON: MAGRI

15.00 – 15.40	Schief	<i>Integrable structure in discrete projective and Lie sphere differential geometries</i>
15.40 – 16.10	Man'ko	<i>Triangle geometry of spin states and nonlinear superposition of probabilities describing these states</i>
16.10 – 16.40	Müller-Hoissen	<i>Tropical limit of matrix Boussinesq solitons</i>
16.40 – 17.00	Coffee Break	
17.00 – 17.30	Khusnutdinova	<i>On long weakly-nonlinear surface and internal waves with curvilinear fronts</i>
17.30 – 18.00	Boscolo	<i>Self-phase modulation in optical fibres</i>
18.00 – 18.30	Moro	<i>Hydrodynamic theory of phase transitions</i>

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Thursday 20 morning session

		CHAIRPERSON: ROGERS
09.00 – 09.40	Calogero	<i>Polynomials with multiple zeros and solvable dynamical systems including models in the plane with polynomial interactions</i>
09.40 – 10.20	Veselov	<i>Geometry and Integrability in $SL(2, \mathbb{Z})$ dynamics</i>
10.20 – 10.50	Grinevich	<i>NLS rogue waves: from finite-gap solutions to elementary approximation</i>
10.50 – 11.10	<i>Coffee Break</i>	
11.10 – 11.40	Santini	<i>Exact rogue wave recurrence in integrable NLS type models. Regular behavior or blow up at finite time</i>
11.40 – 12.10	Pogrebkov	<i>Darboux system: Liouville reduction and explicit solution</i>
12.10 – 12.40	Prinari	<i>Inverse scattering transform and solitons for square matrix nonlinear Schrodinger equations</i>
12.40 – 13.10	Sergyeyev	<i>Recursion Operators for Multidimensional Integrable Systems</i>

Thursday 20 afternoon session

		CHAIRPERSON: KODAMA
15.00 – 15.40	Magri	<i>In the wake of Jacobi and Levi Civita</i>
15.40 – 16.20	Mikhailov	<i>Recursion, Hamiltonian and preHamiltonian operators for differential-difference equations</i>
16.20 – 17.00	Ferapontov	<i>On integrability of dispersionless Hirota type equations</i>
17.00 – 17.20	<i>Coffee Break</i>	
17.20 – 17.50	Pavlov	<i>Integrable Dispersive Effects in the Shallow Water with Vorticity</i>
17.50 – 18.20	Lorenzoni	<i>Bi-Flat F-manifolds, complex reflection groups and integrable systems of conservation laws</i>

Friday 21 morning session

CHAIRPERSON: ZAKHAROV

09.00 – 09.40	Kuznetsov	<i>Quasi-Lagrangian integration for the hydrodynamic type systems</i>
09.40 – 10.10	Novikov	<i>Integrability in 3D</i>
10.10 – 10.40	Ortenzi	<i>Parabolic regularization of the gradient catastrophes for the Burgers-Hopf equation and Jordan chain</i>
10.40 – 11.00	<i>Coffee Break</i>	
11.00 – 11.30	Nijhoff	<i>Lagrangian multiforms and quantum variational principle</i>
11.30 – 12.00	Orlov	<i>Chord diagrams, quantum chaos and Hurwitz numbers</i>
12.00 – 12.40	Marmo	<i>An Assessment of Lagrangian and Hamiltonian formalisms, classical and quantum</i>

12.40 – 13.00 Closing (F. Pempinelli and M. Boiti take part by Skype)

Friday 21

14.00	Excursion
20.00	Social dinner



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