

Geometry, Integrability, Quantization

a workshop dedicated to Vladimir Rubtsov
on the occasion of his 60th birthday

SISSA, Trieste — July 9 to 12, 2012

Supported by:

SISSA

GNSAGA — INDAM

Interactions of Low-Dimensional Topology and Geometry with Mathematical Physics
(ESF)

Istituto Nazionale di Fisica Nucleare

Scientific committee: U. Bruzzo, B. Enriquez, Y. Kosmann-Schwarzbach, J. Krasil'shchik,
V. Lychagin, A. Morozov

Programme

Monday, July 9th

- 10:00-11:00 V. Retakh, Noncommutative integrable systems and quasideterminants
- 11:30-12:30 A. Alekseev, The Horn problem and planar networks
- 14:30-15:30 E. Ferapontov, Quadratic line complexes, conformal structures in \mathbb{P}^3 and linearly degenerate PDEs
- 15:45-16:45 C. Bartocci, Monadic description of framed sheaves on Hirzebruch surfaces
- 17:00-18:00 D. Gurevich, A new approach in Noncommutative Geometry

Tuesday, July 10th

- 9:30-10:30 I. Reider, Correspondences, nonabelian Jacobian and geometric Langlands program for complex projective surfaces
- 10:45-11:45 O. Lisovyy, Algebraic solutions of Painlevé VI
- 12:00-13:00 F. Sala, Sheaves and instantons on ALE spaces
- 15:00-16:00 I. Roulstone, A geometric description of Navier-Stokes flows
- 16:30-17:30 G. Ortenzi, Flutter of a vortex filament and gradient catastrophe
- 20:00 Dinner

Wednesday, July 11th

- 9:30-10:30 P. Rossi, Symplectic geometry from symplectic topology
10:45-11:45 Volodya's work
12:00-13:00 F. Hélein, Covariant functionals on the covariant phase space
15:00-16:00 P. Tortella, Nijenhuis structures and Λ -connections
16:30-17:30 P. Antunes, Hypersymplectic structures on Courant algebroids

Thursday, July 12th

- 9:30-10:30 C. Roger, Matrix-valued Miura transform
10:45-11:45 Volodya's work
12:00-13:00 M. Bertola, The Cauchy matrix model and the Meijer-G random point field
15:00-16:00 M. Cafasso, Fredholm determinants, Riemann-Hilbert problems and noncommutative Painlevé equations
16:30-17:30 G. Falqui, Manin matrices and applications to integrable systems

U. Bruzzo, B. Enriquez, Y. Kosmann-Schwarzbach, J. Krasil'shchik, V. Lychagin will talk about their collaborations with Vladimir Rubtsov.

Other participants: N. Amburg, G. Aminov, S. Artamonov, L. Dabrowski, V. Dolotin, P. Dunin-Barkovsky, D. Galakhov, T. Grava, G. Helminck, H. Kanno, N. Kononenko, E. Krylov, G. Landi, G. Marelli, A. Marshakov, K. Maruyoshi, A. Mironov, S. Mironov, Al. Morozov, And. Morozov, Ant. Morozov, M. Pedroni, O. Ptitisyna, V. Poberezhny, I. Polyubin, F. Popov, P. Pushkar, C. Rava, B. Runov, V. Shadura, A. Sleptsov, A. Stern, E. Suslova, A. Tanzini, D. Vasiliev, F. Yagi