Mathematical Physics: Past, Present, and Future

Euler International Mathematical Institute,   March 26–30, 2014

Wednesday, March 26

9:15—9:50	Registration
9:50—10:00	Opening
10:00—10:40	**Leon Takhtajan** On spectral theory of one functional–difference operator
10:45—11:15	Coffee break
11:15—11:55	**Olivier Babelon** Virasoro on the lattice: Volterra, Toda–2, and q–Toda
12:00—12:40	**Fedor Smirnov** One–point functions in sinh–Gordon and three–point–function in Liouville models
12:45—14:30	Lunch
14:30—15:10	**Evgeny Sklyanin** Quantum integrable hypergeometric systems
15:15—15:45	Coffee break
15:45—16:25	**Michael Semenov–Tian–Shansky** Poisson geometry of difference Lax operators, and difference Galois theory
16:30—17:10	**Stanislav Smirnov** Self–avoiding walk and integrability
17:30	Welcoming reception

Thursday, March 27

10:00—10:40	**Alexander Vasiliev** Loewner–Kufarev evolution and KP hierarchies
10:45—11:15	Coffee break
11:15—11:55	**Alexander Bobenko** Discrete Liouville equation, discrete minimal surfaces, and applications in architecture
12:00—12:40	**Alexander Its** A conformal block approach to the connection problem of the third Painlevé equation
12:45—14:30	Lunch
14:30—15:10	**Irina Aref'eva** Global holography
15:15—15:35	Coffee break
15:35—16:15	**Vladimir Matveev** Rogue waves in 1+1 and 2+1 integrable models

Steklov Institute (Fontanka, 27, Marble Hall):

18:00	**Günter Ziegler** Sugar cubes, soap bubbles, a revolution and a star: Some stellar images between mathematics and physics (DFG Leibniz Lecture) The lecture will be followed by a reception.

Friday, March 28

10:00—10:40	**Tetsuji Miwa** Quantum symmetry approach to solvable lattice models
10:45—11:15	COFFEE BREAK
11:15—11:55	**Rinat Kashaev** On beta pentagon relations
12:00—12:40	**Nicolai Reshetikhin** Semiclassical q–6j symbols
12:45—14:30	LUNCH
14:30—15:10	**Igor Krichever** Commuting difference operators and combinatorial Gale transform
15:15—15:35	COFFEE BREAK
15:35—16:15	**Joerg Teschner** Light–cone lattice, quantum affine algebras, and the modular double

Academics' House – Vladimir Palace (Dvortsovaja embankment, 26):

18:00—18:45	EXCURSION (preliminary registration required)
19:00	CONCERT

Saturday, March 29

10:00—10:40	**Robert Schrader** Piecewise linear spaces: Einstein metrics and Ricci flows
10:45—11:15	COFFEE BREAK
11:15—11:55	**Rudolf Seiler** Multidimensional universally typical sets and the Lempel–Ziv algorithm
12:00—12:40	**Antti Kupiainen** Mandelbrot cascades and their uses
12:45—14:30	LUNCH
14:30—15:10	**Vyacheslav Spiridonov** Elliptic hypergeometric functions, superconformal indices, and integrable systems
15:15—15:45	COFFEE BREAK
15:45—16:25	**Alexander Volkov** Tetrahedral Y–system
16:30—17:10	**Vitaly Tarasov** Real Schubert calculus and integrable models

Sunday, March 30

10:00—10:40	**Antti Niemi** Strings, integrable models and biology — a new frontier?
10:45—11:15	COFFEE BREAK
11:15—11:55	**Andrey Slavnov** Quantization of gauge fields beyond perturbation theory
12:00—12:40	**Pavel Mnev** On AKSZ moduli spaces
12:45—14:30	LUNCH