

# Sunday, June 26

MORNING SESSION 09:00–11:45

Chairman: Jacek Szmigielski

- 09:00–09:10** Opening
- 09:10–10:05** *Generalized Gelfand–Tsetlin integrable systems and cluster algebras*  
**Milen YAKIMOV**, Louisiana State University, USA
- 10:05–10:35** Coffee break
- 10:35–11:15** *Lagrangian manifolds and Maslov indices corresponding to the spectral series of the Schrödinger operators with delta-potentials.*  
**Andrei SHAFAREVICH**, Moscow State University, Russia
- 11:20–11:45** *Planar Composite String, S-functions and Quantum Affine Algebras*  
**Rodrigo LUNA**, State University of Londrina, Brazil

AFTERNOON SESSION 14:30–16:50

Chairman: Milen Yakimov

- 14:30–14:55** *On isospectral deformations of classical inhomogeneous strings*  
**Jacek SZMIGIELSKI**, University of Saskatchewan, Canada
- 15:00–15:25** *Painleve equations, elliptic integrals and elementary functions*  
**Henryk ŻOŁĄDEK**, Uniwersytet Warszawski, Poland
- 15:25–15:55** Coffee break
- 15:55–16:20** *Hamiltonian reduction and Duality for the  $BC_n$  Ruijsenaars model*  
**Ian MARSHALL**, High School of Economics, Russia
- 16:25–16:50** *On symmetries and conserved quantities in Nambu mechanics*  
**Marián FECKO**, Univerzita Komenského v Bratislave, Slovakia

# Monday, June 27

MORNING SESSION 09:00–12:35

Chairman: Ruben Mkrтчyan

- 09:00–09:55** *Supergeometry of gauge PDE and AKSZ sigma models*  
**Maxim GRIGORIEV**, Lebedev Physical Institute, Russia
- 10:00–10:40** *Deformation quantization with separation of variables on a split supermanifold*  
**Alexander KARABEGOV**, Abilene Christian University, USA
- 10:40–11:10** Coffee break
- 11:10–11:50** *Thickening and quantization of the category of (super)manifolds*  
**Theodore VORONOV**, University of Manchester, UK
- 11:55–12:35** *Higher Koszul brackets*  
**Hovhannes KHUDAVERDIAN**, University of Manchester, UK

AFTERNOON SESSION 14:30–16:50

Chairman: Andrei Shafarevich

- 14:30–14:55** *An adaptation of the WKB approximation to deformation quantisation*  
**Jaromir TOSIEK**, Politechnika Łódzka, Poland
- 15:00–15:25** *String Lie theory and diffeomorphism groups*  
**Wojciech WOJTYŃSKI**, Uniwersytet w Białymstoku, Poland
- 15:25–15:55** Coffee break
- 15:55–16:20** *The Shmushkevich method for higher symmetry groups*  
**Goce CHADZITASKOS**, České Vysoké Učení Technické v Praze, Czech Republic
- 16:25–16:50** *Hamilton Operators and Related Integrable Differential-Algebraic Novikov–Leibniz Structures*  
**Anatolij PRYKARPATSKI**, Akademia Górniczo-Hutnicza, Poland

# Tuesday, June 28

MORNING SESSION 09:00–12:35

Chairman: Hovhannes Khudaverdian

- 09:00–09:55** *An infinite dimensional Lie algebra and conserved charges in String theory*  
**Dorothea BAHNS**, Universität Göttingen, Germany
- 10:00–10:40** *Noncommutative gauge theory of generalized (quantum) Weyl algebras*  
**Tomasz BRZEZIŃSKI**, Uniwersytet w Białymstoku / Swansea University, Poland / UK
- 10:40–11:10** Coffee break
- 11:10–11:35** *Generalized Fock spaces and second quantization as examples of hypercontractive semigroups*  
**Marek BOŻEJKO**, Uniwersytet Wrocławski, Poland
- 11:40–12:05** *Quasi-periodic algebras and their automorphisms*  
**Anatolij ANTONEVICH**, Uniwersytet w Białymstoku, Poland
- 12:10–12:35** *Coadjoint dynamical systems and group  $C^*$ -algebras*  
**Daniel BELTIȚĂ**, Institute of Mathematics “Simion Stoilow” of the Romanian Academy, Romania

AFTERNOON SESSION 14:30–16:35

Chairman: Alexander Karabegov

- 14:30–15:10** *Poisson transforms for tensor products of representations of  $SL(2, R)$*   
**Vladimir MOLCHANOV**, Derzhavin Tambov State University, Russia
- 15:10–15:40** Coffee break
- 15:40–16:05** *Local optimality of sub-Riemannian geodesics*  
**Michał JÓŹWIKOWSKI**, Instytut Matematyczny Polskiej Akademii Nauk, Poland
- 16:10–16:35** *Celestial geometry of Lorentzian manifolds*  
**Innocenti MARESIN**, Steklov Mathematical Institute, Russia

# Wednesday, June 29

MORNING SESSION 09:00–12:00

Chairman: Tomasz Brzeziński

- 09:00–09:55** *Universality in simple Lie algebras and Chern–Simons theory*  
**Ruben MKRTCHYAN**, Yerevan Physics Institute, Armenia
- 10:00–10:40** *Geometric structures canonically related to a  $W^*$ -algebra*  
**Anatol ODZIJEWICZ**, Uniwersytet w Białymstoku, Poland
- 10:40–11:05** Coffee break
- 11:05–11:30** *Partial Poisson structure*  
**Fernand PELLETIER**, Université de Savoie, France
- 11:35–12:00** *Banach Poisson Lie groups and the restricted Grassmannian*  
**Alice Barbara TUMPACH**, Laboratoire Painlevé, France

POSTER SESSION 12:00–13:00

# Thursday, June 30

MORNING SESSION 09:00–12:20

Chairman: Alexei Rybkin

- 09:00–09:55** *An algebraic background for hierarchies of PDE in dimension (2|1)*  
**Claude ROGER**, Université Claude-Bernard Lyon 1, France
- 10:00–10:25** *Conformal symmetry and nonlinear Maxwell fields*  
**Gerald GOLDIN**, Rutgers University, USA
- 10:25–10:55** Coffee break
- 10:55–11:20** *Wigner function for a qubit*  
**Jerzy KIJOWSKI**, Centrum Fizyki Teoretycznej, PAN, Poland
- 11:25–11:50** *The complete list of normal forms for germs of vector fields with quadratic leading part*  
**Ewa STRÓŻYNA**, Politechnika Warszawska, Poland
- 11:55–12:20** *In Memoriam: S. Twareque Ali*  
**Gerald GOLDIN**, Rutgers University, USA

AFTERNOON SESSION 14:30–17:20

Chairman: Jerzy Kijowski

- 14:30–15:25** *Symmetry breaking operators for infinite-dimensional representations*  
**Michael PEVZNER**, Université de Reims, France
- 15:30–15:55** *Holomorphic functions on the symmetrized bidisk*  
**Tirthankar BHATTACHARYYA**, Indian Institute of Science, India
- 15:55–16:25** Coffee break
- 16:25–16:50** *The puzzle of empty bottle in quantum mechanics*  
**Bogdan MIELNIK**, CINVESTAV, Mexico
- 16:55–17:20** *Electronic properties of carbon nanostructures*  
**Jan SMOTLACHA**, Joint Institute of Nuclear Research, Russia

# Friday, July 1

AFTERNOON SESSION 14:00–17:30

Chairman: Emma Previato

- 14:00–14:10** Opening
- 14:10–15:05** *Schrödinger operator with continuous spectrum and turbulence in integrable systems*  
**Vladimir ZAKHAROV**, University of Arizona, USA
- 15:10–16:05** *Integrable Probability and the Role of Painlevé Functions*  
**Craig TRACY**, University of California, Davis, USA
- 16:05–16:35** Coffee break
- 16:35–17:00** *Soliton hierarchies and matrix loop algebras*  
**Wen-Xiu MA**, University of South Florida, USA
- 17:05–17:30** *The Cauchy problem for the KdV equation with no decay at minus infinity*  
**Alexei RYBKIN**, University of Alaska Fairbanks, USA

# Saturday, July 2

MORNING SESSION 09:00–12:50

Chairman: Plamen Iliev

- 09:00–09:55** *Elliptic and Hyperelliptic Fibrations in Integrability*  
**Emma PREVIATO**, Boston University, USA
- 10:00–10:55** *Stable and unstable del Pezzo surfaces*  
**Ivan CHELTSOV**, University of Edinburgh, UK
- 10:55–11:25** Coffee break
- 11:25–11:50** *Iterated Integrals and Periods over Totally Real Number Rings*  
**Ivan HOROZOV**, Bronx Community College / City University of New York, USA
- 11:55–12:20** *Behavior of solutions for the Exciton-Polariton system*  
**Cristi GUEVARA**, Louisiana State University, USA
- 12:25–12:50** *Open problems panel*  
**Vladimir ZAKHAROV**, University of Arizona, USA

AFTERNOON SESSION 14:30–17:20

Chairman: Wen-Xiu Ma

- 14:30–14:55** *An exactly solvable quantum four-body problem associated with the symmetries of an octacube*  
**Steven JACKSON**, University of Massachusetts, USA
- 15:00–15:25** *Darboux transformations of differential operators on the superline*  
**Ekaterina SHEMYAKOVA**, State University of New York at New Paltz, USA
- 15:30–15:55** *A quantum integrable system on the sphere and bispectrality*  
**Plamen ILIEV**, Georgia Institute of Technology, USA
- 15:55–16:25** Coffee break
- 16:25–16:50** *Geometry and Topology on the Bethe Ansatz for the Periodic ASEP model*  
**Axel SAENZ**, University of California, Davis, USA
- 16:55–17:20** *Hurwitz numbers for  $RP^2$  and  $CP^1$  cases, matrix integrals and integrable systems*  
**Aleksander ORLOV**, Institute of Oceanology / High School of Economics, Russia