

Monday, June 29

MORNING SESSION 09:30–12:50

09:00–09:30 Registration

- 09:30–10:00** Opening
- 10:00–10:55** *Crystallographic actions on Lie groups and post-Lie algebra structures*
Dietrich BURDE, University of Vienna
Austria
- 10:55–11:25** Coffee break
- 11:25–11:50** *On the Gupta–Bleuler and Dirac–Fock quantization schemes revisiting*
Anatolij PRYKARPATSKI, Cracow University of Technology
Poland
- 11:55–12:20** *Kähler and Poisson Geometry of affine coadjoint orbits of infinite-dimensional unitary groups*
Alice Barbara TUMPACH, Wolfgang Pauli Institut
Austria
- 12:25–12:50** *Poisson structures and Banach Lie algebroids*
Tomasz GOLIŃSKI, University of Białystok
Poland

Lunch: 13:00–14:00

AFTERNOON SESSION 14:30–16:20

- 14:30–14:55** *Affunctional analysis*
Tomasz BRZEZIŃSKI, University of Białystok / Swansea University
Poland / UK
- 14:55–15:25** Coffee break
- 15:25–15:50** *Affinization of algebraic structures: Lie algebras*
Krzysztof RADZISZEWSKI, University of Białystok
Poland
- 15:55–16:20** *Stratification of the Jeffrey–Weitsman half-density quantization of the Moduli Space of flat connections and Witten–Chern–Simons invariants*
Adrian CHITAN, Western University
Canada

18:30 Conference dinner: restaurant Żubrowisko (Rynek Kościuszki 10)

Tuesday, June 30

MORNING SESSION 09:30–12:20

- 09:30–10:25** *The Riemann sphere of operators on Hilbert space*
Alejandro VARELA, Instituto Argentino de Matemática (Alberto P. Calderón) CONICET
Argentina
- 10:25–10:55** Coffee break
- 10:55–11:20** *A structural rule behind octonionic geometry and Hopf-type constructions*
Jean-Pierre GAZEAU, University of Białystok / Université Paris Cité
Poland
- 11:25–11:50** *Quantization of web geometry*
Jonathan SMITH, Iowa State University
USA
- 11:55–12:20** *The space proper-time manifold*
Goce CHADZITASKOS, Czech Technical University in Prague
Czech Republic

Lunch: 13:00-14:00

14:30-15:00 Poster session

AFTERNOON SESSION 15:00–16:50

- 15:00–15:25** *Standard and nonstandard exponential functions on time scales, including discrete and q -calculus cases*
Jan CIEŚLIŃSKI, University of Białystok
Poland
- 15:25–15:55** Coffee break
- 15:55–16:20** *Group representations of Lorentz transformations extended to superluminal observers*
Marco ZAOPO
Italy
- 16:25–16:50** *Dressing actions and symplectic leaves of Banach Poisson–Lie groups*
Amin TAHIRI, Utrecht University
Netherlands

Wednesday, July 1

MORNING SESSION 09:30–12:50

- 09:30–10:25** *Quantum and classical geodesic flows on a black-hole background*
Shahn MAJID, Queen Mary University of London
United Kingdom
- 10:25–10:55** Coffee break
- 10:55–11:50** *A rich garden of metrics in the space of quantum states*
Karol ŻYCZKOWSKI, Jagiellonian University
Poland
- 11:55–12:20** *Optimized two-qubit systems*
Oscar ROSAS-ORTIZ, CINVESTAV
Mexico
- 12:25–12:50** *Scalar-anchored Connes distance and Helstrom geometry of the qubit Bloch ball*
Kaushlendra KUMAR, Queen Mary University of London
United Kingdom

Lunch: 13:00-14:00

AFTERNOON SESSION 14:30–17:20

- 14:30–14:55** *One-Cross Bundles and Noncommutative Geometric Yang–Baxter Solutions*
Réamonn Ó BUACHALLA, Charles University
Czech Republic
- 15:00–15:25** *Regular C^* -irreducible inclusions and Galois correspondence*
Bartosz KWAŚNIEWSKI, University of Białystok
Poland
- 15:25–15:55** Coffee break
- 15:55–16:20** *When is the Drinfeld Double Hopf algebra part of a Hopf brace structure?*
Brais RAMOS PÉREZ, Universidade de Santiago de Compostela
Spain
- 16:25–16:50** *Crystallization and K -theoretical aspects of the quantum twistor bundle*
Suvrajit BHATTACHARJEE, University of Białystok
Poland
- 16:55–17:20** *Differential structure on quantum spacetime and its quantum symmetry group*
Patryk MIESZKALSKI, Uniwersytet Wrocławski
Polska

Thursday, July 2

MORNING SESSION 09:30–10:25

09:30–10:25 *Lie algebroid symmetry with bundle-valued n -plectic geometry*
Yuji HIROTA, Azabu University
Japan

11:00-15:00 excursion to the Podlasie Museum of Folk Culture (ul. Leśna 7, 16-010 Wasilków). Departure by bus from Campus.

15:00-20:00 lunch/dinner with a campfire in Folwark Nadawki (ul. Nadawki 23, 16-010 Wasilków)

Friday, July 3

MORNING SESSION 09:30–12:20

- 09:30–10:25** *Introduction to k -contact geometry and applications*
Javier DE LUCAS, University of Warsaw
Poland
- 10:25–10:55** Coffee break
- 10:55–11:20** *Transfer of integrable structures of soliton hierarchies to integrable Newton equations*
Stefan RAUCH, Linköping University
Sweden
- 11:25–11:50** *Topology of generalized Sklyanin algebras*
Giorgi KHIMSHIASHVILI, Ilia State University
Georgia
- 11:55–12:20** *A multivector generator of time evolution in the phase plane*
Kyriaki-Evangelia ASLANI, University of the Peloponnese
Greece

Lunch: 13:00–14:00

AFTERNOON SESSION 14:30–16:50

- 14:30–14:55** *Quadratic deformations and 2-compatible Lie algebras*
Marzena SZAJEWSKA, University of Białystok
Poland
- 15:00–15:25** *Splitting of discrete Weyl orbit function transforms in the root system A_3*
Vojtěch TESKA, Czech Technical University in Prague
Czech Republic
- 15:25–15:55** Coffee break
- 15:55–16:20** *Structure of Clifford groups of composite finite quantum systems*
Miroslav KORBELÁŘ, Czech Technical University in Prague
Czech Republic
- 16:25–16:50** *Gaussian vs α -Gaussian world*
Krzysztof ZAJKOWSKI, University of Białystok
Poland

Saturday, July 4

MORNING SESSION 09:30–12:20

- 09:30–10:25** *A colored look at anyons and parastatistics*
Francesco TOPPAN, Centro Brasileiro de Pesquisas Físicas
Brazil
- 10:30–10:55** *Anyonic quantum particle structures from representations of a universal kinematical group*
Gerald GOLDIN, Rutgers University
USA
- 10:55–11:25** Coffee break
- 11:25–11:50** *Some applications of the Birman–Schwinger operator in quantum mechanics*
Manuel GADELLA, University of Valladolid
Spain
- 11:55–12:20** *Confluent algorithm and spectral manipulation in quantum mechanics*
David J. FERNÁNDEZ C., CINVESTAV
Mexico
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Lunch: 13:00–14:00

AFTERNOON SESSION 14:30–16:20

- 14:30–14:55** *Periodic vs. chaotic orbits for iterated physical systems*
Tomasz CZYŻYCKI, University of Białystok
Poland
- 14:55–15:25** Coffee break
- 15:25–15:50** *Scattering on a rectangular potential barrier in phase space quantum mechanics*
Luca CAMPOBASSO, Lodz University of Technology
Poland
- 15:55–16:20** *Dynamic flows on a sphere*
Igor BAYAK, Yanka Kupala State University of Grodno
Belarus