

Wednesday, July 11

Group32 - Prague 2018

| Room          | Atrium   | 10   | 11  | 103   | 111   | 114   | 115   | 215  | 314 |
|---------------|--|--|---|---|---|---|---|--|-----|
| Topic         | 1  | 11   | 3   | 2   | 10  | 8   | 5   | 13   |     |
| 14:00-14:25   | Van der Jeugt: Parabosons, parafermions and representations of $(Z_2 \times Z_2)$ graded Lie superalgebras   | Deriglazov: Corrections to Lense-Thirring and frame-dragging effects due to gravimagnetic moment of a  | Rosenhaus: SUB-SYMMETRIES: properties, and applications   | Bai: Deformations and their controlling cohomologies of O-operators                                     | Klauder: Solving the Insoluble: A New Rule for Quantization   | Bergshoeff: Gravity and the planar spin-2 Schrödinger equation                          | Vinet: The Racah algebra as a finite W algebra and superintegrable models                             | Vinitsky: On generation of the Bargmann-Moshinsky basis of $SU(3)$ group                                   |     |
| 14:30-14:55   | Stoilova: Odd Gel'fand-Zetlin basis and Clebsch-Gordan Coefficients for Covariant Representations of the Lie | Rausch de Traubenberg: Dihedral Invariant Polynomials in the effective Lagrangian of QED (I)           | HATZINIKITAS: The short-time limit of the Dirichlet partition function and the image method                     | Chen: Characterizing topological properties of 1D non-Hermitian systems with chiral symmetry by winding | Schroek, Jr.: Theory and Examples of Quantum Mechanics on Phase Space                                     | Marrani: On the Physics of Exceptional Periodicity                                      | Tempesta: Haantjes Algebras and Superintegrability  | Gozdz: Partner groups and quantum numbers  |     |
| 15:00-15:25   | Nishiyama: Fourier transform of the Riesz distribution on enhanced symmetric cone                            | SAWADO: Spectral flow and the index analysis for the skyrmions of the $S^2CP^N S^2$ and the $S^2 NS^2$ | Simulik: On the bosonic symmetries of the Dirac equation with nonzero mass                                      | Yahalom: Metage Symmetry Group of Non Barotropic Magnetohydrodynamics and the Conservation of Cross     | Kowalski: On the coherent states in the relativistic quantum mechanics                                    | Kunitomo: Heterotic string field theory and new relations extending $L_\infty$ algebra  | Post: Rank-2 Racah and Askey-Wilson Algebras  | Gusev: High Accuracy Finite Element Method for Elliptic Multidimensional Boundary Value Problems           |     |
| 15:30 - 15:55 | Zuevsky: Foliations associated to vertex algebras  | Shnir: Gauged Baby Skyrme Model with and without Chern-Simons Term                                     | Kuwata: Quaternion-based generalization of conformal maps   | Sergiyev: Plethora of integrable (3+1)-dimensional systems via contact geometry                         | Horzela: Hermite coherent states: expected and unexpected properties                                      | Zheng-Johansson: Gravitational Radiation – A Solution based on Quantum Electromagnetism | Ritter: Scattering of deformed two dimensional coulomb potential                                      | Kycia: Topological analysis of nuclear pasta phases  |     |
| Topic         | 1  | 11   | 3   | 2   | 10  | 8   | 5   | 13   |     |
| 16:00-16:25   | Coffee Break   |  |   |   |   |   |   |  |     |
| 16:30-16:55   | Alcock-Zeilinger: Hermitian Young projection and unitary transition operators of $SU(N)$ on $V \otimes m$    | Faux: A graph-theoretic underpinning for conformal supergravity  | Berntson: Integrable delay-differential equations   | Motegi: Izergin-Korepin approach to symmetric functions   | de Guise: Sum rules and coset functions in multiphoton interferometry                                     | Novák: Problem of finite number of Hopf-linked rings                                    | Pogosyan: Elliptic basis for the Zernike system   | Salehi: A New Model for Calculating the Mass Spectrum of Hyperons under the Modified killingbeck Potential |     |
| 17:00-17:25   | Olive: Effective computation of $SO(3)$ and $O(3)$ linear representations symmetry classes                   | Catto: Octonionic Methods in Field Theory  | Charalambous: Lie and non-Lie symmetries for a chain of equations arising from a nonlinear diffusion-convection | Jakimowicz: Tangent lifts of bi-Hamiltonian structures  | Koide: Second Law of Thermodynamics induced by Symmetry analogous to Pseudo-Hermiticity in Nonequilibrium | Sciarappa: Gauge theory approach to quantum relativistic integrable systems             | Abouamal: Superintegrable quantum systems   | Pedrak: Quanym algebraic motion and partner groups   |     |
| 17:30-17:55   | Butorac: Principal subspaces of higher level standard modules for twisted affine Lie algebras                | Gresnigt: Braids, normed division algebras, and Standard Model symmetries                              | Zohrabi: Locally Conformally Cocalibrated G2-Structure  | Grekov: Supersymmetric generalization of the qKZ-Ruijsenaars correspondence                             | Czuchry: Quantum Toda-like regularisation of the Mixmaster anisotropy                                     | Sabido: On Deformed Phase Space Deformations in Cosmology.                              | Rauch: Number of integrals required for integrability   | Moroz: A general constraint polynomial approach  |     |
| 18:00-18:25   | Mangum: Fermionic Representations of Twisted Toroidal Lie Algebras   | Smaldone: Patterns of chiral symmetry breaking and dynamical generation of fermion mixing              | Mendez Frago: Analytical solutions of the Gross-Pitaevskii equation for ultracold matter wave packet            | Wojciechowicz: Deformation of algebroid bracket of differential forms and Poisson manifold              | Gazeau: From classical to quantum models: the regularising role of integrals, symmetry and probabilities  | Aschheim: Constructing numbers in quantum gravity: infinities                           | Bertrand: Integrable Hamiltonian systems with magnetic field via circular parabolic-type integrals of | Garcia: Colombeau Quaternion full Algebra  |     |