

XI. International Workshop  
LIE THEORY AND ITS APPLICATIONS IN PHYSICS  
15 - 21 June 2015, Varna, Bulgaria

**List of Contributions**

| Name                                   | Title  |
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| <b>Accardi</b> , Luigi                 | *-Lie algebras canonically associated with probability measures on $\mathbb{R}$ .                |
| <b>Anguelova</b> , Lilia               | De Sitter Space in Gauge/Gravity Duality   |
| <b>Arakawa</b> ,<br>Tomoyuki           | Minimal nilpotent orbit closures and lisse minimal W-algebras                                    |
| <b>Barron</b> , Tatyana                | Toeplitz operators with discontinuous symbols on the sphere.                                     |
| <b>Beige</b> , Almut                   | Field Quantisation in free space and in two-sided optical cavities                               |
| <b>Bonora</b> , Loriano                | Regularization of conformal correlators  |
| <b>Bozhilov</b> , Plamen               | A HHL 3-point correlation function in the $\hat{\mathbb{I}}$ -deformed $\text{AdS}_5 \times S^5$ |
| <b>Calderon Martin</b> ,<br>Antonio J. | Lie algebras with a set grading  |
| <b>Colombeau</b> , Jean<br>Francois    | Multiplication of Distributions and Mathematical Physics   |
| <b>Coulembier</b> , Kevin              | Extension fullness of several categories of Lie algebra modules.                                 |
| <b>Dragovich</b> , Branko              | Nonlocal Modified Gravity and Its Cosmology  |
| <b>Ganchev</b> ,<br>Alexander          | Flat Connections in Finance  |
| <b>Georgiev</b> ,<br>Lachezar          | Thermoelectric characteristics of $Z_k$ parafermion Coulomb islands                              |
| <b>Hadjiivanov</b> ,<br>Ludmil         | On the 2D WZNW quantum symmetry algebra  |
| <b>Hakova</b> , Lenka                  | On generalization of Weyl group orbit functions  |
| <b>Henkel</b> , Malte                  | The Arcetri model: an exactly solvable spherical model of interface growth                       |
| <b>Heslop</b> , Paul                   | Bosonization of nilpotent invariants in superspace and $n$ -point                                |

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| <b>Hrivnak</b> , Jiri        | Four types of orthogonal polynomials of affine Weyl groups   |
| <b>Ivanov</b> , Evgeny       | News on $SU(2 1)$ supersymmetric mechanics   |
| <b>Jafarov</b> , Elchin      | Deformation of the $\mathfrak{su}(2)$ Lie algebra through the parity operator and its realization as finite-discrete quantum oscillator models |
| <b>Kawasetzu</b> , Kazuya    | Structure of W-algebras with non-admissible levels   |
| <b>Kobayashi</b> , Toshiyuki | Global Geometry and Analysis on Locally Symmetric Spaces with Indefinite-metric  |
| <b>Komargodski</b> , Zohar   | Sphere Partition Functions and the Zamolodchikov Anomaly   |
| <b>Kreshchuk</b> , Michael   | A quasi-exactly solvable model: two charges in a magnetic field, subject to a non-Coulomb mutual interaction                                   |
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| <b>Kuriksha</b> , Oksana     | Lie symmetry analysis and solutions of generalized Kawahara equations  |
| <b>Lorenzoni</b> , Paolo     | Hamiltonian operators of Dubrovin-Novikov type in 2D   |
| <b>Matsui</b> , Chihiro      | Boundary effects on the supersymmetric sine-Gordon model through light-cone lattice approach   |
| <b>Melnikov</b> , Anna       | Borel orbits of square zero in nilradical of $\mathfrak{sp}_{2n}$ and orbital varieties  |
| <b>Moreau</b> , Anne         | Jet schemes of nilpotent orbit closures in a simple Lie algebra  |
| <b>Motlochova</b> , Lenka    | Cubature formulas of multivariate polynomials arising from symmetric orbit functions   |
| <b>Moylan</b> , Patrick      | Localization and the Canonical Commutation Relations   |
| <b>Navarro</b> , Rosa M.     | About Filiform Lie algebras of order F   |
| <b>Nikolov</b> , Nikolay     | Vertex algebras in higher dimensions are homotopy equivalent to vertex algebras in two dimensions  |
| <b>Nissimov</b> , Emil       | Kruskal-Penrose Formalism for Lightlike Thin-Shell Wormholes   |
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| <b>Penkov, Ivan</b>             | Generalized flags as homogeneous ind-spaces, Schubert decompositions, and real ind-group orbits. |
| <b>Petukhov, Alexey</b>         | On categories of bounded $(g, k)$ -modules   |
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| <b>Yamada, Hiromichi</b>    | Vertex operator algebras associated with $\mathbb{Z}_k$ -codes   |
| <b>Zinn-Justin, Paul</b>    | Generalized Littlewood--Richardson rules and quantum integrability   |
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