

List of Participants BGL-8

1. **Zoltán Horváth** (*Ferenc Rákóczi II. Transcarpathian Hungarian Institute, Beregszász, Ukraine*) **On geodesic mappings of Riemannian spaces(which have special (cyclic) Ricci tensor)**
2. **Robert R. Lompay**(*Uzhgorod National University, Uzhgorod, Ukraine*) **A New Conserved Tensorial Current in the Bimetric Formulation of Background Independent Field Theories**
3. **László Jenkovszky** (*Bogolyubov Institute for Theoretical Physics of the National Academy of Sciences of Ukraine, Kiev, Ukraine*) **Bolyai's language**
4. **Pavlov D.G., S.S. Kokarev, Panchelyuga M. S., Panchelyuga V.A.** (*Research Institute of Hypercomplex Systems in Geometry and Physics, Friaзино, Regional Scientific-Educational Center "Logos", Yaroslavl, Institute of Theoretical and Experimental Biophysics of RAS, Pushchino, Russia*) **Preliminary investigations of physical manifestations of hyperbolic fields**
5. **M. Haysak, I. Haysak, M. Hnatic** (*Institute of Electron Physics Ukr. Nat. Acad Sci. and Uzhgorod National University, Uzhgorod, Ukraine, Institute of Experimental Physics SAS, Koshice, Slovak Republic*) **Bound states of the three-BODY quantum system of H-e⁺**
6. **I.Yu. Krivsky, V.M. Simulik and T.M. Zajac** (*Institute of Electron Physics, Ukr. Nat. Acad. Sci., and Uzhgorod National University, Uzhgorod, Ukraine,*) **Derivation of the Dirac equation from the canonical quantum mechanics of spin s=1/2 doublet**
7. **Robert R. Lompay, A.N. Petrov** (*Uzhgorod National University, Uzhgorod, Ukraine and Relativistic Astrophysics group, Sternberg Astronomical Institute, Moscow, Russia*) **Manifestly Covariant Form of the Klein and Noether Identities, Generalized Noether Current, and Superpotential in the Diffeomorphic Invariant Classical Field Theories with Torsion**
8. **Róbert Oláh-Gál** (*Department of Economics, Sapientia University, Miercurea Ciuc, Romania*) **The Physicist Mór Réthy(1846-1925), as the First Bolyai-Researcher**
9. **Hidezumi Terazawa** (*Center of Asia and Oceania for Science(CAOS), Higashi-kurume, Tokyo, Japan and Midlands Academy of Business & Technology (MABT),Mansion House, Leicester, United Kingdom*) **Environment-dependent fundamental physical constants (In the Theory of General Inconstancy)**
10. **M. Haysak, Yu. Muchychka, V. Onysko** (*Institute of Electron Physics Ukr. Nat. Acad Sci., and Uzhgorod National University, Uzhgorod, Ukraine*) **Binding energy of the**

helium atom isotopes In the two-dimensional space of adiabatic hyperspherical approach

11. *V.M. Simulik, I.Yu. Krivsky, O.V. Palamarchuk and I.L. Lamer (Institute of Electron Physics, Ukr. Nat. Acad. Sci., Uzhgorod, Ukraine, Department of Information Systems and Technologies, Kyiv National Economic University, Kyiv, Ukraine)* **Structure and different realizations of the extended real Clifford – Dirac algebra**
12. *D.G.Pavlov (Research Institute of Hypercomplex Systems in Geometry and Physics, Fryazino Russia)* **Hypothesis of hyperbolic fields and its consequences for astrophysical observations**
13. *G. M. Polotovskiy (N.I. Lobachevsky State University of Nizhniy Novgorod, Nizhniy Novgorod, Russia)* **V.V. Morozov, D.A. Gudkov, and the first part of the 16th Hilbert's problem**
14. *M. Haysak, M. Yevych, R. Yevych (Institute of Electron Physics Ukr. Nat. Acad. Sci., and Uzhgorod National University, 88000 Uzhgorod, Ukraine)* **Binding energy of negative ions of excitons for semiconductors Cu_2O and CdSe in adiabatic hyperspherical approach**
15. *T.B. Shpenyk (Uzhgorodsky National University, Uzhgorod, Ukraine)* **The algorithm of search of the optimum solution to a problem in the schedule theory on the quantity of devices**
16. *V.M. Simulik, I.Yu. Krivsky, I.L. Lamer and T.M. Zajac (Institute of Electron Physics, Ukr. Nat. Acad. Sci. and Uzhgorod National University, Uzhgorod, Ukraine)* **Dual symmetries of the Dirac equation in its different representations**
17. *V. Red'kov, E. Ovsyuk, O. Veko (Institute of Physics, NAS of Belarus, Minsk and Mozyr State Pedagogical University, Mozyr, Gomel region, Belarus)* **Spin 1/2 particle in the field of Dirac string on the background of de Sitter space–time**
18. *V.M. Simulik, I.Yu. Krivsky, I.L. Lamer and T.M. Zajac (Institute of Electron Physics, Ukr. Nat. Acad. Sci. and Uzhgorod National University, Uzhgorod, Ukraine)* **On the group-theoretical foundations for Fermi – Bose duality of spinor field. Solutions**
19. *A.V. Nazarenko (Bogolyubov Institute for Theoretical Physics, Kiev, Ukraine)* **Directed random walk on the eight–branching Cayley tree**

20. *Emil Molnár* (Budapest University of Technology and Economics, Institute of Mathematics Department of Geometry) **On the 8 homogeneous 3-geometries and their projective visualization**
21. *George Krylov and Maxim Belov* (Physics Department, Belarusian State University, Minsk, Belarus) **Revised Treatment of Quantum Propagator for a Step Potential**
22. *I.Yu. Krivsky, V.M. Simulik, I.L. Lamer and T.M. Zajac* (Institute of Electron Physics, Ukr. Nat. Acad. Sci. and Uzhgorod National University, Uzhgorod, Ukraine) **Well-defined formulation of the Lagrange approach for the Foldy – Wouthuysen field**
23. *V.T. Maslyuk* (Institute of Electron Physics, Ukr. Nat. Acad. Sci., Uzhhorod, Ukraine) **The mass (charge) spectrum of superheavy nuclei fission fragments: the new perspectives for the theory of nucleosynthesis**
24. *Sergey S. Kokarev* (Research Institute of Hypercomplex Systems in Geometry and Physics, Fryazino, Russia) **Theoretical estimations of experimentally observed power density spectrum shift of quartz generator in vicinity of non-stationary processes**
25. *H.V. Grushevskaya, N.G. Krylova* (Belarusian State University, Minsk, Belarus) **Application of Finsler geometry to instant on-like process of LB-nanostructures emerging in monolayer**
26. *V.M. Simulik, I.L. Lamer, and I.Yu. Krivsky* (Institute of Electron Physics, Ukr. Nat. Acad. Sci., Uzhgorod, Ukraine) **Fermi – Bose conservation laws for the spinor field**
27. *Halina V. Grushevskaya* (Belarusian State University, Minsk, Belarus) **Relativistic quantum coherent transport of low-dimension diffractive excitons**
28. *O.N. Golubjeva, A.D. Sukhanov* (Peoples' Friendship University of Russia, Moscow, Russia, BLTP, JINR, Dubna, Russia) **Geometrical sense of saturated schrodinger uncertainties relation**
29. *Piotr Garbaczewski* (Institute of Physics, University of Opole, Opole, Poland) **L'vy flights and fractional quantum mechanics**
30. *V.M. Fedorchuk, V.I. Fedorchuk* (Institute of Mathematics, Pedagogical University, Cracow, Poland, Pidstryhach Institute of Applied Problems of Mechanics and Mathematics Ukr. Nat. Acad. Sci., Lviv, Ukraine) **Classification of non-singular manifolds in the space $M(1,4) \times R(u)$ invariant under one- and two- dimensional non-conjugate subalgebras of the Lie algebra of the Poincaré group $P(1,4)$**

- 31. Valeriy V. Dvoeglazov** (*Universidad de Zacatecas, Mexico*) **Majorana-like Neutrino and Photon: Chirality, Helicity, and Charge Conjugation**
- 32. T.M. Zajac, V.M. Simulik and R.V. Tymchyk** (*Uzhgorod National University and Institute of Electron Physics, Ukr. Nat. Acad. Sci., Uzhgorod, Ukraine*) **Sampling of the helium atom ground state wave function in the ionization problem**
- 33. L. Bandurina, K. Bartscha, V. Gedeon, O. Zatsarinny** (*Institute of Electron Physics, Ukr. Nat. Acad. Sci. and Uzhgorod National University, Uzhgorod, Ukraine, Drake University, De-Moin, Iowa, USA*) **Electron scattering by the boron atom**
- 34. Lengyel and Z. Tarics** (*Institute of Electron Physics, Uzhgorod, Ukraine*) **Which Pomeron survives at LHC energies?**
- 35. Anatoliy K. Prykarpatsky** (*Ivan Franko State Pedagogical University, Drohobych, Ukraine*) **The Maxwell electrodynamics and the Lorentz type force derivation - the Feynman approach legacy**
- 36. G.S. Yevdokimova, V.V. Maslyuk, A.N. Zaviopulo** (*Institute of Electron Physics, Ukr. Nat. Acad. Sci and Transkarpatian State University, Uzhhorod, Ukraine*) **Molecular magnetism in CR-wheels**
- 37. G.S. Yevdokimova, O.V. Farberovich, V.V. Maslyuk** (*Institute of Electron Physics, Ukr. Nat. Acad. Sci. And Transkarpatian State University, Uzhhorod, Ukraine, Department of Chemistry, Ben-Gurion University of the Negev, Beer-Sheva, Israel*) **Noncollinear molecular magnetism: spin-frustrated structures of V₁₅ cluster**
- 38. Yu. Vasilenko, V. Polishchuk** (*Transkarpatian State University, Uzhhorod, Ukraine*) **Evaluation of the importance of Boolean arguments concerning the function**
- 39. E.M. Ovsyuk** (*Mozyr State Pedagogical University, Mozyr, Belarus, e-mail: e.ovsyuk@mail.ru*) **Quasi-plane waves for a particle with spin 1/2 on the background of Lobachevsky geometry, simulating of a special medium**