

National Academy of Sciences of Ukraine
Bogolyubov Institute for Theoretical Physics

Bogolyubov Kyiv Conference

Problems of Theoretical and Mathematical Physics
dedicated to the 115th anniversary of M.M. Bogolyubov (1909-1992)

Poster Session

24 September

Presenters schedule

ASTROPHYSICS AND COSMOLOGY

1. **Oleksandr Bukalov** “On the solution of the problem of the cosmological constant”, *Centre for Physical and Space Research, International Institute of Sociotics, Kyiv*

STATISTICAL PHYSICS AND KINETIC THEORY

2. **Ivan Gandzha, Oleksandr Kliushnichenko, Sergey Lukyanets** “Collapse mitigation in a socioeconomic system under a systemic shock”, *Institute of Physics, National Academy of Sciences of Ukraine*
3. **Andrei Snarskii**, “Graph Structural Complexity”, *The National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"*
4. **Maxym Dudka** “Lattice models of ionic liquids in conducting slit nanoconfinement”, *Institute for Condensed Matter Physics*
5. **Oleksandr Cherniak, Volodymyr Zasenکو** “Subensembles of magnetized particles in random electric fields”, *Bogolyubov Institute for Theoretical Physics*
6. **Yevgen Shevchenko, Volodymyr Leonov, Victor Teslenko, Elmar Petrov** “Spin-boson description of the temporal behavior of the dynamical system with time-dependent coupling to the environment”, *Bogolyubov Institute for Theoretical Physics*
7. **Sergey Lukyanets, Oleksandr Kliushnichenko** “Nonequilibrium protection effect and spatial localization of noise-induced fluctuations: gas flow scattering on partially penetrable obstacle” *Institute of Physics, National Academy of Sciences of Ukraine*
8. **Alexander Sokolovsky, Serhiy Lyagushyn** “The development of Bogolyubov reduced description method in the application to spin and quasispin systems”, *Oles Honchar Dnipro National University*
9. **Daniil Doroshenko** “Modified potential energy theorem in radiating systems: Implementation in MATLAB” *Oles Honchar Dnipro National University*

HIGH ENERGY PHYSICS AND NUCLEAR MATTER

10. **Tetiana Obikhod** “AdS/CFT correspondence and classification of Kaluza-Klein modes within the supergroup” *Institute for Nuclear Research NAS of Ukraine*
11. **Volodymyr Skalozub** “Spontaneous magnetization and effective interactions in QGP at high temperature”, *Oles Honchar Dnipro National University*

12. **Volodymyr Gorkavenko, Oleksandr Khasai, Mariia Tsarenkova, Oleg Ruchayskiy** “Constraints on the parameters of HNL and baryon asymmetry of the Universe”, *Bogolyubov Institute for Theoretical Physics*
13. **Alexey Dzyublik, Krzysztof Starosta, Joshua Yu, Takeshi Koike** “Microscopic derivation of the generalised Bohr Hamiltonian”, *Institute for Nuclear Research of NASU*

CONDENSED MATTER PHYSICS

14. **Eugene Eliseev, Anna Morozovska** “Polaronic model of the Giant Dielectric and Pyroelectric Responses of Ferroelectric Fine-Grained Ceramics”, *Frantsevich Institute for Problems in Materials Science*
15. **Oleksii Bereznykov, Anna Morozovska, Oleksandr Pylypchuk, Denis Stetsenko, Serhii Ivanchenko** “Model of effective permittivity for dense ferroelectric nanocomposites”, *Institute of Physics*
16. **Tetiana Bubon, Dmytro Piatnytskyi, Sergiy Perepelytsya** “DNA condensation induced by Li⁺ counterions”, *Bogolyubov Institute for Theoretical Physics*
17. **Olha Boliasova, Vladimir Krivoruchko** “The electric field quantum control of spin-waves dynamics in easy-axis antiferromagnets”, *State Research Institution «Kyiv Academic University»*
18. **Ihor Syzon, Oksana Gorobets, Volodymyr Kulish** “Supercritical propagation of nonlinear magnetization wave through an antiferromagnetic magnonic crystal” *National Technical University of Ukraine «Igor Sikorsky Kyiv Polytechnic Institute»*
19. **Ye.O. Melezhyk, Z.F. Tsybrii, V.V. Zabudsky, N.N. Kukhtaruk, V. Strelchuk, A. Nikolenko, O. Kolomys, D. Maziar, M. Aleksandrov, P.M. Lytvyn** “Evaluating Benchmarks for the Effectiveness of Infrared Camouflage Coatings”, *V. Lashkaryov Institute of Semiconductor Physics*
20. **Mariana Krasnytska, Petro Sarkanych, Yuriy Holovatch, Bertrand Berche, Ralph Kenna** “Invisible states Potts model”, *Institute for Condensed Matter Physics*
21. **Oleksii Khorolskyi** “Influence of the pH of aqueous sodium chloride solutions with dissolved carbon dioxide on the temperature interval of human vital activity”, *Poltava V.G. Korolenko National Pedagogical University*
22. **Victor S. Gerasimchuk, Yuri I. Gorobets, Oksana Yu. Gorobets, Igor V. Gerasimchuk** “3D Non-Uniform Antiferromagnetic Spin Texture Based Magnetic Nano-Oscillator”, *Institute of Magnetism*
23. **Yuliia Horbatenko, Oksana Korolyuk, Oleksander Krivchikov, Olesya Romantsova** “Features of the temperature dependences of the thermal

- conductivity of composites and the Meyer-Neldel rule”, *B.Verkin Institute for Low Temperature Physics and Engineering*
24. **Maksym Barabashko, Oleksandr Krivchikov, Yuliia Horbatenko** “Low temperature behavior of the heat capacity of MWCNTs with Ø9.4 nm: component of flexural dispersion for phonons”, *B.Verkin Institute for Low Temperature Physics and Engineering*
 25. **Serhiy Kondratenko** “Photoconductivity transients in GeSn alloys”, *Taras Shevchenko National University of Kyiv*
 26. **Yu.G. Terentieva, I.M. Dmitruk, Kateryna Maiko, A.M. Rashevskya, Ye.Yu. Stepanenko**, “Quantum-chemical and spectral analysis of ATP/AMP molecules conformers in water surround”, *Taras Shevchenko National University of Kyiv*
 27. **Jay Amrit, Kostiantyn Niemchenko, Yehor Niemchenko, Mykyta Spotar, Tetiana Vikhtynska** “Phonon heat transfer in conductors of arbitrary cross-section”, *V.N.Karazin Kharkiv National University*
 28. **Volodymyr Sagan, Oleksandr Krivchikov, Vyacheslav Konstantinov** “The thermal conductivity of composites based on ABS and epoxy resin”, *B.Verkin Institute for Low Temperature Physics and Engineering*
 29. **Victor Gozhenko** “Influence of the unit cell size of periodic electromagnetic metamaterials on their optical properties”, *Institute of Physics*