

## Scientific program of International Conference «Physical Interpretations of Relativity Theory -2017»

*Monday, 3 July, 2017*

<b>9.00 Opening the PIRT Conference</b>		
<b>Chair: Blair D. (Australian International Gravitational Research Centre, University of Western Australia, Australia)</b>		
9.30-10.00	<i>Dadhich N. (IUCAA, PUNE, India)</i>	Understanding General Relativity after 100 years: a novel perspective
10.00-10.20	<i>Sakellariadou M. (King's College London, University of London, Great Britain)</i>	Unweaving the fabric of the Universe
10.20-10.40	<i>Meierovich B. (P.L. Kapitza Institute for Physical Problems, Russia)</i>	Motion in a central field with account of dark matter
10.40-11.00	<i>Burinskii A. (Nuclear Safety Institute of the Russian Academy of Sciences, Russia)</i>	Weakness of gravity as the illusion hiding a true way to physics of elementary particles
11.00-11.20	<i>Dokuchaev V., Berezin V.A., Eroshenko Yu.N. (Institute for Nuclear Research, Russian Academy of Sciences, Russia)</i>	Global geometry of the Vaydya metric
<b>11.20-11.40 Coffee Break</b>		
<b>Chair: Dadhich N. (IUCAA, PUNE, India)</b>		
11.40-12.00	<i>Domínguez P. (University of Guadalajara, México)</i>	Super-Poynting vector and comoving observers in the Einstein-Rosen spacetime
12.00-12.20	<i>Petrova L. (Moscow State University, Russia)</i>	Connection the functionals of field-theory equations with the state functionals of equations of mathematical physics
12.20-12.40	<i>Khusnutdinov N., Emelianova N. (University Federal do ABC, Brasil)</i>	Radiation of particle in wormhole spacetime
12.40-13.00	<i>Ray P., Mishra B. (Department of Mathematics, BITS-Pilani, Hyderabad Campus, India)</i>	Anisotropy in viscous fluid Dark Energy cosmological model
<b>13.00-13.40 Lunch</b>		
<b>13.40-14.00 Poster Papers</b>		
<b>Chair: Chervon S. (Ulyanovsk State Pedagogical University, Russia)</b>		
14.00-14.20	<i>Monakhov V. (Saint Petersburg State University, Russia)</i>	Superalgebraic structure of Lorentz transformations

14.20-14.40	<i>Fomin I. (Bauman University, Russia)</i>	The exact solutions in cosmological models with Gauss-Bonnet scalar
14.40-15.00	<i>Vargashkin V. (Oryol State University named after I.S. Tourguenev, Russia)</i>	The analysis of frequency-independent jumps of CMB according to the Planck data
15.00-15.20	<i>Litvinov D. (Sternberg Astronomical Institute, Moscow State University, Russia)</i>	RadioAstron gravitational redshift test
15.20-15.40	<i>Avramenko A. (P.N. Lebedev Physical Institute of RAS, Russia)</i>	The relativistic inertial coordinate reference frames, synchronized the observed radio emission of pulsar
<b>15.40-16.00 Coffee Break</b>		
<b>Chair: Rowlands P. (University of Liverpool, United Kingdom)</b>		
16.00-16.20	<i>Darvas G. (Symmetrion, Hungary)</i>	Hypersymmetry of gravitational and inertial masses in relativistic field theories
16.20-16.40	<i>Zhotikov V. (Moscow Institute for Physics and Technology, Russia)</i>	Geometric interpretation of fields and forces of inertia in the nature
16.40-17.00	<i>Lim S. J. (DXN Institute, Malaysia)</i>	Metric tensors for electromagnetic fields
17.00-17.20	<i>Chelnokov M. (Bauman University, Russia)</i>	Inversion of time and temporal chaos of the Universe
17.20-17.40	<i>Tarai S., Mishra B. (Birla Institute of Technology and Science, India)</i>	Viscous fluid cosmological model in $f(R, T)$ gravity
17.40-18.00	<i>Grushevskaya H., Krylova N. (Belarusian State University, Belarus)</i>	A geometrothermodynamics of gravitating system with axially symmetric metric

**Tuesday, 4 July, 2017**

<b>Chair: Gorelik V. (Bauman University, Russia)</b>		
9.00-9.30	<i>Sazhina O., Sazhin M. (Sternberg Astronomical Institute, Lomonosov Moscow State University, Russia)</i>	Search for gravitational lenses along the first cosmic string candidate
9.30-10.00	<i>Levin S. (Moscow Institute for expertise and tests, Russia)</i>	Anisotropy excess of red shift for supernovae type SN Ia
10.00-10.20	<i>Korotaev S., Budnev N., Serdyuk V., Kiktenko E., Zurbanov V., Gorohov J., Orekhova D., Tabolenko V. (Bauman University, Russia)</i>	Macroscopic entanglement and time reversal causality by data of the Baikal experiment

10.20-10.40	<i>Tskhovrebov A., Zherikhina L., Ryabov V. (Moscow Aviation Institute, Russia)</i>	Two methods for a search of a magnetic monopole: a dynamic scheme – SQUID-magnetic calorimeter and a static scheme – SQUID-magnetostrictor
<b>10.40-11.00 Coffee Break</b>		
<b>Chair: Sakellariadou M. (King's College London, University of London, Great Britain)</b>		
11.00-11.20	<i>Adhikari M. (University of Calcutta, IMBIC, International Egyptian Engineering Mathematical Society, Institute for Polymath, India)</i>	Spectral Homology and Cohomology Theories. This study is from the view point of topology
11.20-11.40	<i>Beesham A. (University of Zululand, South Africa)</i>	Vaidya Collapse with nonzero radial pressure
11.40-12.00	<i>Brandyshev P. (Moscow State Pedagogical University, Russia)</i>	Inflation, superstrings and hidden time-like dimensions
12.00-12.20	<i>Bogoslovsky G. (Skobeltsyn Institute of Nuclear Physics, Lomonosov Moscow State University, Russia)</i>	The rest momentum as an additional property of a massive particle in Finsler space-time
12.20-12.40	<i>Chervon S. (Ulyanovsk State Pedagogical University, Russia)</i>	Cosmology from Modified Gravity
12.40-13.00	<i>Zarikas V., Kofinas G. (School of Engineering Central Greece University of Applied Sciences Lamia GR, AND Nazarbayev University, Astana KZ, Greece)</i>	Phenomenological Aspects of Asymptotic Safe Gravity
<b>13.00–13.40 Lunch</b>		
<b>13.40-14.00 Poster Papers</b>		
<b>Chair: Gladyshev V.O.(Bauman University, Russia)</b>		
14.00-14.20	<i>Blair D. (Australian International Gravitational Research Centre, University of Western Australia, Australia)</i>	Creating physical interpretations of Einstein's relativity for universal education in the era of gravitational wave astronomy
14.20-14.40	<i>Pustovoit V. (Bauman University, Science Technological Center of Unique Instruments of RAS, Russia)</i>	Laser interferometers to detect gravitational waves, and proposals for improving their accuracy
14.40-15.00	<i>Rudenko V. (Sternberg State Astronomical Institute, Lomonosov Moscow State University, Russia)</i>	Relativistic gravitational experiments of the Russian Academy of Sciences and Moscow State University
15.00-15.20	<i>Gorelik V., Pustovoit V., Gladyshev V., Morozov A., Kauts V., Sharandin E., Fomin I., Portnov D. (Bauman University, Russia)</i>	Generation and detection of high-frequency gravitational waves at intensive external excitation

15.20-15.40	<i>Li Ju (The Univeristy of Western Australia, Australia)</i>	Towards an Asia-Australia gravitational wave detector—the challenges
<b>15.40-16.00 Coffee Break</b>		
<b>Chair: Kauffman L. (University of Illinois at Chicago, United States)</b>		
16.00-16.20	<i>Eroshenko Yu. (Institute for Nuclear Research of the Russian Academy of Sciences, Russia)</i>	Gravitational waves from primordial black holes collisions in binary systems
16.20-16.40	<i>Krysanov V. (Institute for Nuclear Research RAS, Russia)</i>	Non-stationary Noise Sources in an Optoacoustical Gravitational Antenna
16.40-17.00	<i>Dubrovich V. (SAO RAS, Russia)</i>	Gravitational-Axion telescope
17.00-17.20	<i>Hajra S. (Indian Physical Society, India)</i>	Confirmation of SR, GR and GW by experiments
17.20-17.40	<i>Izmailov G., Tskhovrebov A., Zherikhina L. (Moscow Aviation Institute, Russia)</i>	The Compact High Sensitive System SQUID - magnetostrictor: the Possibility of Developing a Phased Array for Gravitational Waves Registration
17.40-18.00	<i>Kerner R. (University Pierre et Marie Curie, Paris VI, France)</i>	On the quantum origin of the Lorentz group

*Wednesday, 5 July, 2017*

<b>Chair: Beesham A. (University of Zululand, South Africa)</b>		
9.00-9.30	<i>Sushkov S. (Kazan Federal University, Russia)</i>	The screening Horndeski cosmologies
9.30-9.50	<i>Bronnikov K. (VNIIMS, Russia)</i>	Wormholes, “trapped ghosts”, and the stability problem
9.50-10.10	<i>Yurasov N., Yurasov I. (Bauman University, Russia)</i>	Bosons and the black hole
10.10-10.40	<i>Skripnik F., Zadorozhnyi N., Korogodina E., Timchenko S. (Bauman University, Russia)</i>	Reflection and refraction electromagnetic waves at the dielectric surface: peculiarities interactions
<b>10.40-11.00 Coffee Break</b>		
<b>Chair: Sushkov S. (Kazan Federal University, Russia)</b>		
11.00-11.20	<i>Dominis Prester Predrag (University of Rijeka, Croatia)</i>	Induced actions for higher spin fields
11.20-11.40	<i>Il'ichov L. (Novosibirsk State University, Russia)</i>	Probabilities in the topos approach to branching space-time
11.40-12.00	<i>Antonyuk P. (Bauman University, Russia)</i>	The electromagnetic wave in Wien's

		displacement law
12.00-12.20	<i>Izmailov G., Gorelik V. (Moscow Aviation Institute, Russia)</i>	Applications of paramagnetics for photon-axion conversion
12.20-12.40	<i>Galaev S. (Saratov State University, Russia)</i>	Prolonged almost AP-structures in unified theory of gravitational and electromagnetic interactions
12.40-13.00	<i>Gasimov N. (Cukurova University, Institute of Natural and Applied Sciences, Turkey, Adana)</i>	Some aspects of mass-energy equivalence which appears in left handed metamaterials
<b>13.00-13.40 Lunch</b>		
<b>13.40-14.00 Poster Papers</b>		
<b>Chair: Yee Jack Ng (University of North Carolina, USA)</b>		
14.00-14.20	<i>Munera Hector A. (International Centre Physics, Colombia)</i>	General relativity as a fluid theory
14.20-14.40	<i>Gorelik V., Filatov V. (Bauman University, Russia)</i>	The Resonance $\gamma+\gamma\rightarrow p\gamma$ Conversion in the f-block of the Periodic Table
14.40-15.00	<i>Gladyshev V.O., Strunin A.G., Kautz V.L., Kayutenko A.V. (Bauman University, Russia)</i>	Effects of moving media optics in GLONASS optical segment of new generation
15.00-15.20	<i>Masood-ul-Alam A.K.M. (Tsinghua University, China)</i>	The variable Planck's constant due to imaginary gravitational temperature
15.20-15.40	<i>Vladimirov Yu. (Moscow State University, Russia)</i>	Gravitational interaction in geometrical and relational paradigms
15.40-16.00	<i>Fil'chenkov M., Laptev Yu. (Institute of Gravitation and Cosmology, Peoples' Friendship University of Russia, Russia)</i>	Field Interpretation of General Relativity

**Thursday, 6 July, 2017**

<b>Chair: Amoroso R. (Noetic Advanced Studies Institute, United States)</b>		
9.00-9.20	<i>Rowlands P. (University of Liverpool, United Kingdom)</i>	Fundamental symmetries foundational to physics
9.20-9.40	<i>Kauffman L. (University of Illinois at Chicago, United States)</i>	Braiding, Majorana Fermions and the Dirac Equation
9.40-10.00	<i>Adhikari A. (Calcutta University, India)</i>	Visual Cryptography and DNA Secret Sharing:

		Two Simple ways to Store Secret Information in a Secure Way
10.00-10.20	<i>Animalu A.O., Edeagu S., Trelle E., Godfrey Ejiroghene Akpojotor (University of Nigeria, Nigeria)</i>	Semiology of Linguistics and Geometric Lie Algebra Foundation of Atomic Structure and Periodic System
10.20-10.40	<i>Berezin V., Dokuchaev V.I., Eroshenko Yu.N. (Institute for Nuclear Research, Russian Academy of Sciences, Russia)</i>	Phenomenology of cosmological particle creation, Dirac sea and all that
<b>10.40-11.00 Coffee Break</b>		
<b>Chair: Sazhin M. (Sternberg Astronomical Institute, Lomonosov Moscow State University, Russia)</b>		
11.00-11.20	<i>Amoroso R. (Noetic Advanced Studies Institute, United States)</i>	Ontological-Phase Topological Field Theory: Context for Einstein/Newton Duality
11.20-11.40	<i>Rist Joann Sydney, Rowlands P. (University of Liverpool, Great Britain)</i>	Representations Of The Nilpotent Dirac Matrices
11.40-12.00	<i>Karam S. (Morgan state University, United States)</i>	Sakharov Curvature in Rowlands Duality-Spacetime
12.00-12.20	<i>Mayburov S. (P.N. Lebedev Physical Institute of RAS, Russia)</i>	Commutative Fuzzy Geometry, Quantization and Space-time
12.20-12.40	<i>Trelle E. (Linköping, University, Sweden), Edeagu S., Animalu A. (University of Nigeria, Nigeria)</i>	Self-organized isotropic vector matrix translation apparatus for realization of the electron, nucleon, and periodic system
12.40-13.00	<i>Siparov S. (State University of Civil Aviation, Russia)</i>	Geometrical Aspects of Physical Theory
<b>13.00-13.40 Lunch</b>		
<b>13.40-14.00 Poster Papers</b>		
<b>Chair: Animalu A.O. (University of Nigeria, Nigeria)</b>		
14.00-14.20	<i>Shishanin A. (Bauman University, Russia)</i>	Some solutions for scalar models and conformal invariance
14.20-14.40	<i>Tripathy S. (Indira Gandhi Institute of Technology, Sarang, India)</i>	Late time cosmic acceleration and anisotropic dark energy
14.40-15.00	<i>Liu Jian-Liang, Yu C. (Shantou University, China)</i>	Quasi-local energy and the application on the Kerr spacetime
15.00-15.20	<i>Samanta Gauranga Charan (Birla Institute of Technology and Science Pilani Goa Campus, India)</i>	Cosmological model in van der Waals fluid
15.20-15.40	<i>Mishra B. (Department of Mathematics, BITS-</i>	An Accelerating Dark Energy Model with

	<i>Pilani, Hyderabad Campus, India)</i>	Hybrid Scale Factor
<b>15.40-16.00 Coffee Break</b>		
<b>Chair: Trelle E. (Linköping, University, Sweden)</b>		
16.00-16.20	<i>Dumin Yu. (Sternberg Astronomical Institute, Lomonosov Moscow State University, Russia)</i>	Local Hubble Expansion: Current State of the Problem
16.20-16.40	<i>Savelova E., Kirillov A. (Bauman University, Russia)</i>	<i>Variable speed of light in vacuum</i>
16.40-17.00	<i>Tomilin K. (S.I. Vavilov Institute for the History of Science and Technology, Russia)</i>	Yang-Mills equations and gauge coupling constants
17.00-17.20	<i>Kassandrov V. (Institute of Gravitation and Cosmology, Peoples' Friendship University of Russia, Russia)</i>	Holographic origin of the space-time geometry
17.20-17.40	<i>Silagadze Z., Chashchina O., Foot R. (Budker Institute of Nuclear Physics and Novosibirsk State University, Russia)</i>	Radial acceleration relation and dissipative dark matter
17.40-18.00	<i>Kirillov A., Savelova E.P. (Bauman University, Russia)</i>	Stable cosmological wormholes

#### Posters:

*Aliev I., Samedova Z. Optical-mechanical analogy and quantum trajectory (Bauman University, Russia)*

*Antonyuk P. Extreme ball which is limited by extreme sphere (Bauman University, Russia)*

*Rylov Yu. Unification of classical mechanics and quantum mechanics in united conception of particle dynamics (Institute for Problems in Mechanics Russian Academy of Sciences, Russia)*

*Stepanova T., Viahhi E. Properties of the Spatial-Temporary Continuum and Entropy (Peter the Great St. Petersburg Politechnic University, Russia)*

*Kamalov T. Instability states and ostrogradsky formalism (Moscow Institute of Physics and Technology, Russia)*

*Kauts V., Gladyshev V., Bazleva D., Strunyn A. Relativistic test of moving media electrodynamics through the Luneberg lens (Bauman University, Russia)*

*Gorelik V. Laser excitation of bound photonic states in dielectrics (Bauman University, Russia)*

*Pavlov A. Exact solutions of Friedmann equation for supernovae data (Moscow State Agricultural University, Russia)*

*Bukhman N. Principle of Causality, Non-Anthropogenous Forecasting and Superluminal Velocity of Propagation of a Signal (Samara State Technical University, Russia)*

*Lebedev Yu. On the question of everettical mechanism of formation of the Future from the Past (Bauman University, Russia)*

*Fisenko S. To the issue of reconciling quantum mechanics and General relativity (Moscow state linguistic University, Russia)*

*Lukanenkov A. Gravitational experiments. Interpretation issues (Russia)*

*Nikitin A. GRT experiment: Supernova SN1987A (Russia)*

*Shestakov Yu. Particle in a gravitational field (The Russian center of science «Kurchatovsky institute», Russia)*

*Kudriavtcev Yu. Paradoxes of Quantum Theory from the viewpoint of the Special Relativity (Russia)*

*Lukanenkov A. Experimental confirmation of the doubt about authenticity of the event GW150914 (Russia)*

*Munera Hector A. Absolute velocity of earth from our stationary Michelson-Morley-Miller experiment at CIF, Bogota, Colombia (International Centre Physics, Colombia)*

*Pavlov D. The Basic Properties of the Field of Time (Moscow State Agricultural University, Russia)*

*Gladyshev V.O., Goryushkina D.D., Kayutenko A.V. Accumulation of multiple-beam Fabry-Perot phase response interferometer based on Fizeau effect (Bauman University, Russia)*

*Shestakov Yu. The Independent navigation and system of co-ordinates (The Russian center of science «Kurchatovsky institute», Russia)*

*Koryukin V. “Ghosts” and the Big Bang theory (Mari State University, Russia)*

*Olkhov O. Geometrical interpretation of time (N.N. Semenov Institute of Chemical Physics, Russia)*

*Gladkov S. To the question on common field theory (Moscow aviation institute, Russia)*

*Gladyshev V.O., Bazlev D.A., Kayutenko A.V. The basic principles of building an analytics platform for the search of new scientific knowledge (Bauman University, Russia)*

*Lipkin A. Space and Time in the Theory of Relativity. The “Object Approach (Moscow Institute of Physics and Technology, Russia)*



*Kudriavtcev Yu.* On historical aspect of The Big Bang cosmological model appearance (*Russia*)

*Wong C.* The Highly Collimated Jet Stream of Quasars (*USA*)

*Petrov A.* Spherically symmetric collapse to a point-like state (*Sternberg Astronomical Institute, Lomonosov Moscow State University, Russia*)

*Unal Nuri* Unified spin connection for gravitation and electromagnetism (*Akdeniz University, Turkey*)

*Bulyzhenkov I.* Heat contributes to dynamics of Einstein-Infeld fields (*Moscow Institute of Physics and Technology, Russia*)

*Konstantinov M.* Lorentz Invariance, Causality and Topology of Space-Time: New Questions and Problem (*Bauman University, Russia*)