

**Statement of the
XX International Conference
"Physical Interpretations of the Theory of Relativity (PIRT-2017)"**

The purpose was achieved. In the period from July 3 to July 6, 2017 Bauman Moscow State Technical University held the conference on modern problems of the theory of relativity, cosmology and astrophysics PIRT-2017.

Since 1988 PIRT conference has been held at Imperial College in London. Since 2003 the conference has been held at BMSTU as well. The main organizers are BMSTU, Liverpool University and the Russian Academy of Sciences.

The chairman of the International Organizing Committee is the head of Bauman Moscow State Technical University, Professor Anatoly Alexandrov. Academician Vladislav Pustovoi is the Chairman of the International Academic Committee. The Academic Committee also includes well-known academicians of RAS S.N. Bagaev, N.S. Kardashev, I.B. Fedorov, A.M. Cherepashchuk and etc.

The 2017 conference, which was announced as the Russian-British Year of Education and Science, received support from the Russian Foundation for Basic Research (grant no. 17-02-20289), and a grant from the UK's Science and Innovation Network of the British Embassy in Moscow.

110 reports were delivered at the conference (10 plenary, 69 oral, 31 poster reports). The reports were presented from 54 universities (Appendix 1) and research centers from 27 countries (183 participants, including 61 foreign participants).

The working languages of the conference were Russian and English, simultaneous interpretation of all reports was carried out. Previously, theses of all the reports were published. The full texts of the papers will be published in the Journal of Physics: Conference Series.

Within 4 days, there were delivered reports on current problems in the field of gravity, cosmology, relativistic electrodynamics, high-energy astrophysics, and the experimental consequences of the theory of relativity.

As a part of the conference, there was held a session on the problem of creating a new generation gravitational antenna. Scientists from Great Britain, USA, France, Australia, as well as Russia, where the idea of interferometric method of recording gravitational waves first appeared (M.E. Gertsenshtein, V.I. Pustovoi, 1962) took part in it.

There was also held a meeting on the organization of international scientific research housed by Bauman University and universities of the United Kingdom with the participation of other countries. The meeting was attended by Dr. Jonathan Brenton, Minister and Deputy Head of the UK Mission in Russia, Vladislav Pustovoi, Academician of the Russian Academy of Sciences.

During the conference the journal Nature Physics in the person of Dr. Bart Verberck (Great Britain) held a competition to select the best poster reports and awarded two prizes. During the conference videotaping of scientific sessions was carried out, outstanding scientists were interviewed, and a short film about PIRT-2017, international cooperation of scientists in the field of gravity, cosmology and the theory of relativity was made. Also for participants there was organized a cultural program which included a visit to the historical places of Moscow.

The decisions of the conference:

In order to obtain new fundamental knowledge, to raise the level of education in the field of gravity, cosmology and astrophysics, to develop and strengthen international scientific ties, to ensure full-fledged financing and the implementation of innovations:

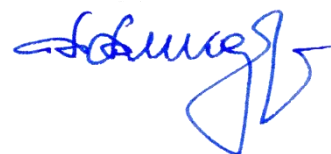
1. We should build a Russian-British permanent work team (with possible participation of other countries). They should work on the problem of creating a compact source and detector of gravity waves, as well as other promising issues in the field of gravity, cosmology and astrophysics. To this end, representatives of the universities organizing the conference (the Faculty of Physics of Liverpool University and the Faculty of Fundamental Sciences of Bauman University) should prepare their proposals (work team composition, work formats - seminars, round tables, internships, etc.) and send them for approval to the heads of the Russian and British Universities participating in PIRT-2017.
2. The organizers of the conference are advised to apply to the International Funds, as well as the British Embassy in Russia, for supporting PIRT-2019 conference, as well as for the financial support of the Russian-British work team on contemporary problems in the field of gravity, cosmology and astrophysics.
3. It is desirable to support the initiative of Bauman University to create an International Laboratory for joint research in the field of improved methods for detecting gravitational waves. The laboratory will accumulate promising ideas in the field of gravitational-wave astronomy, promote the development of an international collaboration and involve more countries of the European-Asian region in a wide-range terrestrial network of gravitational antennas. The Faculty of Fundamental Sciences of Bauman University should be recommended for preparing documents and applying for an International Grant on Gravitational Wave Astronomy with participation of Universities and scientists participating in PIRT-2017.
4. The conference organizers should provide access for a wide audience to the results of the conference, publish the full texts of the recommended reports in English, and post reports on the conference website, including popular science reports.
5. All participants should be recommended for posting information about PIRT-2017, making a film about the conference, international cooperation of scientists in the field of gravity, cosmology and the theory of relativity on information portals of universities, research centers and scientific societies.

Chairman of the Academic Committee



Professor Vladislav I. Pustovoi
Member of Russian Academy of Sciences

Chairman of the Organizing Committee



Professor Anatoly A. Aleksandrov
Rector of Bauman Moscow State Technical University

Universities and Research centers (Appendix 1)

Страна	Университеты
Argentina	Universidad Nacional de Córdoba
Australia	Australian International Gravitational Research Centre, University of Western Australia
Azerbaijan	Institute of Physics of Azerbaijan Academy of Sciences
Belarus	Belarusian State University
Brasil	Universidade Federal da Paraíba University Federal do ABC
China	Fudan University Shantou University Tsinghua University
Colombia	International Centre Physics
Croatia	University of Rijeka
France	University Pierre et Marie Curie European Space Agency
Great Britain	Commercial Space Technologies Ltd. King's College London Liverpool University Springer Nature University of London University of Surrey
Greece	Aristotle University of Thessaloniki University of Applied Sciences Lamia
Hungary	Symmetrion
India	Calcutta University Department of Mathematics, BITS-Pilani, Hyderabad Campus Indian Physical Society Indian Statistical Institute Indira Gandhi Institute of Technology Institute of Applied Sciences & GLA University IUCAA, PUNE Swami Ramanand Teerth Marathwada University Birla Institute of Technology and Science University of Calcutta
Italy	National Institute for Nuclear Physics - Section of Pisa University of Rome
Kazakhstan	Nazarbayev University
Malaysia	DXN Institute
México	University of Guadalajara
Netherlands	Bon Physics Research and Investigations BV
Nigeria	University of Nigeria
Pakistan	National University of Computer and Emerging Sciences
Romania	University Politehnica of Bucharest
Russia	Bauman University Budker Institute of Nuclear Physics and Novosibirsk State University Centre for Gravitation and Fundamental Metrology, VNIIMS and Institute of Gravitation and Cosmology Federal Nuclear Center - Institute Of Technical Physics Geoelectromagnetic Research Centre of Schmidt Institute of Physics of the

	<p>Earth RAS Institute for Nuclear Research RAS Institute for Problems in Mechanics Russian Academy of Sciences Institute of Applied Physics of Irkutsk State University Institute of Gravitation and Cosmology Institute of laser physics SB RAS Institute of Terrestrial Magnetism, Ionosphere and Radio Wave Propagation RAS Institute of Theoretical and Experimental Biophysics Kazan Federal University Krasnoyarsk State Pedagogical University named after V.P. Astaf'ev Lomonosov Moscow State University Mari State University Moscow Aviation Institute Moscow Institute for expertise and tests Moscow Institute of Physics and Technology Moscow State Agricultural University Moscow state linguistic University Moscow State Pedagogical University N.N . Semenov Institute of Chemical Physics Nuclear Safety Institute of the Russian Academy of Sciences Oryol State University named after I.S. Tourguenev P. N. Lebedev Physical Institute of RAS P.L. Kapitza Institute for Physical Problems Peoples' Friendship University of Russia Peter the Great St.Petersburg Politechnic University S.I. Vavilov Institute for the History of Science and Technology Saint Petersburg State University Samara State Technical University SAO RAS Saratov State University Science Technological Center of Unique Instruments of RAS Skobeltsyn Institute of Nuclear Physics, Lomonosov Moscow State University Space Research Institute of the Russian Academy of Sciences (IKI) State University of Civil Aviation Sternberg Astronomical Institute of Moscow State University The Research Institute of Hypercomplex Systems in Geometry and Physics The Russian center of science «Kurchatovsky institute» Ulyanovsk State Pedagogical University</p>
South Africa	University of Zululand
Sweden	Linköping University
Turkey	<p>Akdeniz University Cukurova University Institute of Natural and Applied Sciences</p>
U.S.A.	<p>California Institute of Technology Massachusetts Institute of Technology Morgan state University Noetic Advanced Studies Institute University of Illinois at Chicago University of North Carolina</p>
Uruguay	Universidad de la Republica