

International Conference on

Physical Interpretations of Relativity Theory – 2015

http://pirt.info/ http://www.space-lab.ru/

Dear Colleagues,

On June 29th through July 2nd the Department of Physics based within the Fundamental Sciences Faculty of Bauman Moscow State Technical University hosted the International Scientific Conference on Physical Interpretations of Relativity Theory (PIRT) – 2015, which was held in the Laboratory Building of Bauman MSTU.



The conference was dedicated to the 110th anniversary of Einstein's first fundamental paper and the 50th anniversary of the Fundamental Sciences Scientific and Educational Complex of Bauman MSTU. Its program included 80 papers presented by scholars representing leading scientific schools from 10 countries, among which were the United Kingdom, the USA, the Netherlands, Romania, Italy, India, Pakistan, France, China and Russia.

The PIRT conference is a four-day event hosted by Imperial College in London since 1988 and Bauman University in Moscow since 2003.

The idea of the conference was suggested by Dr. Michael Duffy from University of Sunderland, the United Kingdom, at a scientific seminar and originally aimed to make it possible for foreign scientists to communicate freely with scientists from the former Soviet Union. Initially it was planned to hold a conference at Kazan University, Russia, where Nikolai I. Lobachevsky, one of the founders of non-Euclidean geometry, used to work.

In 1988 Michael Duffy organized the first PIRT conference at Imperial College in London, where it is held every two years. The conference is notable for the freedom of scientific views'

exchange, large talks (up to 40 min), conference's *Proceedings* and the participation of Russian scientists.

In 2003 BMSTU hosted PIRT conference in Moscow for the first time. It was organized by Vladimir O. Gladyshev, Peter Rowlands and Michael Duffy. The event was a success and it was decided to hold a conference in Moscow every two years.

At the opening ceremony the participants of the conference were welcomed by Vladimir O. Gladyshev, the head of the Fundamental Sciences Educational Complex, Andrei N. Morozov, head of BMSTU Physics department, Vladislav I. Pustovoit, Director of Science Technological Centre of Unique Instruments of RAS and Peter Rowlands, a researcher at the Physics Department, University of Liverpool.

The following main areas were covered at the conference:

- Cosmology, Gravitation and Space-Time Structure;
- Space-Time Anisotropy, Gravitational Waves;
- High Energy Astrophysics, Early Universe Models;
- Experimental Aspects of Relativity;
- Formal Structures and Physical Interpretations of Relativity Theory;
- Nature and Models of the Physical Vacuum;
- Time, Reference Frames and the Fundamentals of Relativity.
- Analogues of Relativity and Quantum Mechanics.

The conference sessions were held in the Conference Hall of Bauman MSTU. Foreign participants were provided with simultaneous translation during all the sessions, as well as excursions. The conference allowed the participants to get acquainted with the scientific tradition, which is held up in the oldest Russian technical university and which is represented by such prominent scholars as Dmitry I. Mendeleyev, Nikolai E. Zhukovsky, Pafnuty L. Chebyshev, Sergei A. Chaplygin, Alexander S. Ershov, Dmitry K. Sovetkin, Fyodor M. Dmitriev, Alexei V. Letnikov, Alexander P. Gavrilenko, to name but a few.



Among other things, a photo display entitled *Our Universe* including unique pictures of galaxies, nebulae, constellations and star clusters was held during the conference. The social program featured a tour of the center of Moscow, during which the participants could see the Red Square, the Bolshoi Theater, the Cathedral of Christ the Savior, the Novodevichy Convent, the Victory Park and other sights of the city. Some participants had a trip to the city of Kaluga, where they visited the Museum of Konstantin Tsiolkovsky and the Aerospace Museum. The scientific sessions were followed by a banquet, which allowed the participants to discuss the theory of relativity in a more relaxed atmosphere.



As a result of PIRT-2015 Conference the collection of abstracts has been published and it is also planned to publish the Conference Proceedings to be included in the Scopus database.

We kindly invite you to take part in the next conference on Physical Interpretations of Relativity Theory to be held at Bauman MSTU in Moscow on July 3th to 6th, 2017.

Chairman of the Academic Committee

Professor Vladislav I. Pustovoit

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Member of Russian Academy of Sciences,

Director of Science Technological Center of Unique Instruments of RAS, Russia

Chairman of the Organizing Committee

Professor Anatoly A. Aleksandrov

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