

PRIZES AND GRANTS

The JINR N.N. Bogoliubov Prize for the years 2006–2008 was awarded to President of the National Academy of Sciences of Ukraine **Boris Evgenievich Paton**, for the outstanding contribution to science and development of international cooperation, and to RAS Academician **Dmitri Vasilievich Shirkov**, Honorary Director of the N.N. Bogoliubov Laboratory of Theoretical Physics (JINR), for the outstanding contribution to theoretical physics, in particular, for the development of new methods in quantum field theory.

The International N.N. Bogoliubov Prize for young scientists was awarded in 2009 to **Igor Ivanov** (Liège University, Belgium), for the cycle of papers «A New Approach to the General Two-Higgs Doublet Model».

The B. Pontecorvo Prize was awarded in 2009 to Professor **Alexander Dolgov** (ITEP, Moscow) for his fundamental results on neutrino oscillations and kinetics in cosmology, and Professor **Henry Sobel** (University of California, Irvine) for his significant contributions to the field of neutrino oscillation experiments.

The annual Award of the European High Pressure Research Group (EHPRG Award) for the year 2009 was presented to Doctor of Physics and Mathematics **Denis Petrovich Kozlenko**, Chief of department of the

Frank Laboratory of Neutron Physics (JINR), for the integrated studies of complex oxides at the action of high pressure when new interesting physical phenomena were discovered.

By the Order of the Russian Federation Num. 221 of 10 March 2009, the Award of the RF government for the year 2008 in science and technology was presented to **Pavel Yurievich Apel**, Deputy Chief of the Applied Physics Centre of the Flerov Laboratory of Nuclear Reactions (JINR), and Doctor of Chemistry Professor **Yuri Nikolaevich Denisov**, for the elaboration, mass production and application in medicine of the equipment, production supplies and methods of the membrane and donor plasmapheresis.

Two Awards of the **International Academic Publishing Company Science/Interperiodics (IAPC)** were presented for the best publications:

«Properties of Strongly Interacting Matter and Search for a Mixed Phase at the JINR Nuclotron». Authors: A. Sissakian, A. Sorin, M. Suleymanov, V. Tonev, G. Zinovjev;

«On Higgs Mass-Generation Mechanism in the Standard Model» Authors: V. Bednyakov, A. Bednyakov, N. Giokaris.

JINR PRIZES FOR 2009

I. Theoretical Physics Research

First Prize

«Generalized Parton Distributions (Studies of Symmetry Properties of Generalized Parton Distributions and Amplitudes in the Processes with Large Momentum Transfer)».

Authors: A. Radyushkin, O. Teryaev, I. Anikin, B. Pire.

Second Prizes

1. «Unitarization at High Energies and Experiments at LHC».

Authors: O. Selyugin, J.-R. Cudell, E. Predazzi.

2. «Two-Proton Radioactivity and Coulomb Three-Body Decays: Theory, Experiment, Astrophysical Applications».

Authors: L. Grigorenko, M. Zhukov.

II. Experimental Physics Research

First Prize

«Properties of Neutron Rich Helium Isotopes».

Authors: R. Wolski, M. Golovkov, S. Krupko, A. Rodin, S. Sidorchuk, R. Slepnev, S. Stepantsov, G. Ter-Akopian, A. Fomichev, V. Chudoba.

Second Prizes

1. «Top Quark Mass Measurement in the "Dilepton" and "Lepton + Jets" Modes in the CDF Data Sample».

Authors: J. Budagov, V. Glagolev, F. Prakoshyn, A. Sissakian, I. Suslov, G. Velez, R. Roser, G. Chlachidze, G. Bellettini, N. Giokaris.

2. «Magnetic, Charge and Orbital Ordering in Complex Manganese Oxides $R_{1-x}A_xMnO_{3-d}$ at High Pressures».

Authors: D. Kozlenko, B. Savenko, S. Kichanov, E. Lukin.

III. Physics Instruments and Methods

Second Prizes

1. «Development, Construction and Application of Mini Drift Tubes Together with On-Chamber ASIC Electronics for High Energy Physics Experiments».

Authors: V. Abazov, G. Alexeev, M. Baturitsky, O. Dvornikov, A. Kalinin, E. Komissarov, V. Malyshev, V. Mikhailov, V. Tokmenin, Yu. Kharzhev.

2. «Construction and Testing of the Transition Radiation Detector for the ALICE Experiment (JINR's participation)».

Authors: Yu. Zanevsky, L. Efimov, O. Fateev, V. Chepurinov, S. Chernenko, V. Yurevich, C. Schmidt.

3. «Study of Charge-State Distributions of Heavy Ions and Nuclear Reaction Products Using a Broad-Range Magnetic Analyzer».

Authors: R. Kalpakchieva, A. Kulko, S. Lukyanov, Yu. Penionzhkevich, N. Skobelev, Yu. Sobolev.

GRANTS

In 2009, to implement scientific projects, the staff members of the Joint Institute for Nuclear Research received financial support of the International Scientific Technical Centre (ISTC), the Russian Foundation for Basic Research (RFBR) and funds of the RF Ministry of Education and Science.

The Russian Foundation for Basic Research financed projects in the frames of the following contests: «Pilot Scientific Projects» — 56; «Projects to Develop Material and Technical Resources for Scientific Research» — 1; «Target Fundamental Research» — 6; «Publication Projects» — 2; «Scientific Research by Young Russian Scientists in RF Leading Scientific Organizations» — 2.

IV. Applied Physics Research

First Prize

«Cytogenetic Effects of Low-Dose Ionizing Radiation».

Authors: O. Komova, E. Krasavin, L. Melnikova, E. Nasonova, T. Fadeeva, N. Shmakova.

Second Prizes

1. «Seismotectonic Effects of Solid-State Transformations in Geomaterials».

Authors: M. Rodkin, A. Nikitin, R. Vasin.

2. «Investigation of Coherent Scattering of Slow Neutrons on Nanoparticles and the Creation of a Neutron Bottle for Cold Neutrons».

Authors: E. Lychagin, A. Muzychka, V. Nesvizhsky, G. Nekhaev, G. Pignol, K. Protasov, A. Strelkov.

Encouraging Prizes

1. «Nuclear Effects in Relativistic Heavy-Ion Collisions at CERN SPS Energies».

Authors: S. Afanasiev, B. Baatar, M. Gazdzicki, V. Kolesnikov, A. Malakhov, G. Melkumov, P. Seuboth, R. Stock.

2. «Experimental Finding of the Expansion of Pion Generation Volume in Nucleon–Nucleon and Nucleus–Nucleus Interactions».

Authors: M. Anikina, A. Belyaev, A. Golokhvastov, J. Lukstins, A. Troyan, Yu. Troyan.

3. «Neutron Activation Analysis for Geological Studies in Romania».

Authors: M. Frontasyeva, S. Pavlov, O. Culicov, O. Dului, C. Cristache, M. Toma.

RFBR, together with the Austrian Scientific Foundation, financed 1 project; in collaboration with the Belarussian Republican Foundation for Basic Research — 3 projects; together with the National Scientific Research Society of Germany — 8 projects; together with the Helmholtz Association in Germany — 1 project; together with the Ministry of Science and Technology of the Government of India — 2 projects; together with the «EINSTEIN» syndicate in Italy — 1 project; together with the State Foundation of Natural Sciences of China — 3 projects; in collaboration with the Academy of Sciences of Moldova — 1 project; together with the Ministry of Education, Culture and Science of Mongolia — 1 project; together with the Council on Scien-

tific and Technical Research of Turkey — 1 project; in collaboration with the State Foundation for Basic Research of Ukraine — 5 projects; together with the National Centre for Scientific Research of France — 3 projects; together with CERN — 2 projects; together with the Japanese society to promote sciences — 1 project.

RFBR rendered financial support to JINR in the organization of 23 scientific conferences in the frames of the competitions «Organization of All-Russian and International Scientific Conferences in the Territory of Russia» and «Organization of Scientific Events for

Young Scientists». 49 JINR staff members received financial support for their participation in scientific conferences in the frames of the competitions «Participation of Russian Scientists in International Events Abroad» and «Participation of Young Russian Scientists in Scientific Events Held in Russia and Abroad».

In the frames of the Programme of the State Support for Young Russian Scientists and Leading Scientific Schools, the Institute received 5 grants of the President of the Russian Federation, including 3 grants for scientific schools and 2 grants for young Russian scientists.