

PRIZES AND GRANTS

The Bruno Pontecorvo Prize 2005 was awarded to Professors L. Wolfenstein (Carnegie Mellon University, Pittsburg, the USA), S. Mikheev (the Institute for Nuclear Research (INR), Moscow, Russia), A. Smirnov (INR, Moscow, and ICTP, Trieste, Italy) for the prediction and study of matter effects on neutrino oscillations, known as the Mikheev–Smirnov–Wolfenstein effect.

The Humboldt Research Award 2005 was awarded to Professor M. Itkis (JINR) for outstanding achieve-

ments in heavy-ion physics research and considerable contribution to international cooperation and mutual understanding.

The International «Brightness Award» was awarded to D. Donets, E. D. Donets, E. E. Donets and V. Salnikov (VBLHE, JINR) for a series of works under the title «Development of Electron String Source of Highly Charged Ions».

PRIZEWINNERS OF JINR'S ANNUAL COMPETITION FOR BEST RESEARCH

I. Theoretical Physics Research

First Prize

«Analysis of Experimental Data for Deep-Inelastic Lepton Scattering: Asymptotic Freedom and Nonperturbative Effects in QCD».

Authors: A. Kotikov, V. Krivokhizhin, A. Sidorov, A. Kataev, G. Parente.

Second Prize

«Looking for SUSY Dark Matter».

Authors: V. Bednyakov, F. Šimkovic, H. Klapdor-Kleingrothaus.

II. Experimental Physics Research

First Prize

«Study of the Q^2 Dependence of the Generalized Gerasimov–Drell–Hearn Integrals».

Authors: S. Gerasimov, O. Teryaev, J. Soffer, N. Akopov, A. Nagaitsev.

Second Prizes

«Study of Semileptonic Decays of Neutral Kaons».

Authors: V. Kekelidze, L. Litov, D. Madigozhin, Yu. Potrebenikov, S. Stoynev, P. Hristov, C. Cheshkov.

«Experimental Model-Free Determination of Main Parameters of the Cascade Gamma-Decay of Compound Nuclei from the Region $39 < A < 201$ ».

Authors: A. Sukhovej, V. Khitrov.

«Structures of Superheavy Hydrogen Isotopes».

Authors: A. Fomichev, M. Golovkov, L. Grigorenko, A. Korshennikov, Yu. Oganessian, A. Rodin, S. Sidorchuk, S. Stepantsov, G. Ter-Akopian, R. Wolski.

III. Physics Instruments and Methods

First Prize

«Development and Construction of the CDF II Muon Scintillation Detector for Heavy Quark Physics Experiments at the FNAL Tevatron».

Authors: A. Artikov, J. Budagov, A. Sissakian, I. Chirikov-Zorin, D. Chokheli, B. Grinyov, V. Senchshyn, G. Bellettini, S. Tokar, N. Giokaris.

Second Prizes

«Design and Implementation of the 160-Cell Aerogel Cherenkov Detector for the PHENIX Set-Up».

Authors: S. Afanasiev, L. Zolin, V. Ivanov, A. Isupov, A. Litvinenko, A. Malakhov, I. Migulina, V. Peresedov.

«Design and Development of the ECR Ion Source DECRIS-SC with a Superconducting Magnet System».

Authors: V. Bekhterev, S. Bogomolov, S. Dmitriev, A. Efremov, A. Lebedev, S. Paschenko, N. Yazvitsky, V. Drobin, V. Seleznev, Yu. Shishov.

IV. Applied Physics Research

First Prize

«JINR Gigabit Backbone».

Authors: K. Angelov, B. Bezrukov, A. Gushin, I. Emelin, V. Ivanov, L. Popov, A. Dolbilov, S. Medved.

Second Prize

«Neutron Fourier Diffractometry to Study Internal Mechanical Stresses in Bulk Industrial and New Advanced Materials».

Authors: P. Balagurov, G. Bokuchava, E. Kuzmin, V. Sumin, A. Tamonov, Yu. Taran, J. Schreiber.

Encouraging Prizes

«New Aspects of the Theory of the Vavilov–Cherenkov and Synchrotron Radiation».

Author: G. Afanasiev.

«Neutron Spectroscopy and Quantum-Chemical Simulation of Hydrogen Bonds and Dynamics of Biologically Active Molecules».

Authors: I. Natkaniec, A. Pawlukojs, K. Holderna-Natkaniec, A. Szyzewski, I. Majerz, K. Parlinski.

«Influence of Helium on the Synthesizing of Nanostructures in Solid States by Ion Implantation».

Authors: V. Reutov, S. Dmitriev, A. Sohatsky.

GRANTS

In 2005 a number of research projects of the JINR staff members received a financial support of the international funds CRDF (the USA), ISTC, INTAS, DFG (Germany), RFBR–DFG, RFBR–BRFBR (Belarus), RFBR and RF Ministry of Education and Science Funds.

RFBR, together with the National Scientific Research Society of Germany, financed 4 projects. RFBR and the Belarussian–Russian Foundation for Basic Research financed 2 projects.

RFBR financed 64 projects in the competition «Projects on the Initiative», 6 projects in the competi-

tion «Projects of Establishing and Developing Information, Computing and Telecommunication Resources», 1 project in the competition «Oriented Fundamental Research», 1 project in the competition «Development of Material and Technical Basis for Scientific Research», and 2 projects in the competition «Regional Competition *Science City 2005*».

In the framework of the State Programme of support for young Russian scientists and leading scientific schools, the Institute received 5 grants of the President of the Russian Federation, 4 of them for scientific schools and 1 for young scientists.