

PRIZES AND GRANTS

Professor Y. Totsuka (KEK, Tsukuba, Japan) was awarded the **2003 B. Pontecorvo Prize**, in recognition

of his outstanding contribution to the discovery of muon neutrino oscillations.

PRIZEWINNERS OF JINR'S ANNUAL COMPETITION FOR BEST RESEARCH – 2003

Theoretical Physics Research

First Prize

«Integrable Heisenberg–Van Vleck Chains with Variable Range Exchange».

Author: V. Inozemtsev.

Second Prize

«Study of Higher Order Perturbative Corrections and Effects of Nontrivial Structure of the QCD Vacuum in Hadron Processes».

Authors: V. Bytev, A. Vinnikov, A. Dorokhov, N. Kochelev, E. Kuraev, I. Cherednikov.

Experimental Physics Research

First Prize

«Synthesis of Elements 115 and 113».

Authors: Yu. Oganessian, V. Utyonkov, Yu. Lobanov, F. Abdullin, A. Polyakov, I. Shirokovsky, Yu. Tsyganov, G. Gulbekian, A. Mezentsev, M. Itkis.

Second Prizes

«Precision Tests of the Electroweak Theory in the DELPHI Experiment at LEP».

Authors: D. Bardin, I. Boyko, M. Nikolenko, A. Olchevski.

«Magnetic and Atomic Structure of CMR-Manganites: Phase Immiscibility and Isotope Effects».

Authors: V. Aksenov, A. Balagurov, V. Pomyakushin, D. Sheptyakov, N. Babushkina, O. Gorbenko, A. Kaul.

Physics Instruments and Methods

First Prize

«Discovery and Study of the Electron String Phenomenon in the Electron Beam Ion Source KRION and Its Application for the Production of Ar¹⁶⁺ and Fe²⁴⁺ Relativistic Ion Beams at the JINR Nuclotron».

Authors: E. D. Donets, V. Vadeev, S. Gudkov, D. Donets, E. E. Donets, A. Kovalenko, V. Salnikov, E. Syresin, Yu. Tumanova, V. Shutov.

Second Prizes

«DELTA–SIGMA Facility for Simultaneous Measurements at 0° of the Complete Set of np Observables at the L/T Polarized Monochromatic Neutron Beam (LHE JINR), for First Direct Reconstruction of Forward NN Scattering Amplitudes at High Energies».

Authors: L. Strunov, V. Sharov, A. Nomofilov, A. Morozov, E. Chernykh, R. Shindin, A. Livanov, V. Prytkov, N. Kuzmin, I. Zaytsev.

«Kinematic Separator VASSILISSA-2».

Authors: A. Belozerov, V. Chepigin, V. Gorshkov, S. Hofmann, A. Kabachenko, O. Malyshev, A. Popeko, R. Sagaidak, Š. Šaro, A. Yeregin.

«Radiation Effects in Materials of Neutron Cold Moderators».

Authors: E. Shabalin, E. Kulagin, S. Kulikov, V. Melikhov, A. Belyakov, V. Golikov, A. Androsov, L. Golovanov, V. Ermilov, V. Konstantinov.

Applied Physics Research

First Prize

«Biomonitoring of Atmospheric Deposition of Heavy Metals and Other Elements with the Help of Neutron Activation Analysis at the IBR-2 Reactor».

Authors: M. Frontasyeva, S. Pavlov, S. Gundorina, E. Yermakova, O. Kulikov-Stan, T. Ostrovnaya, L. Smirnov, L. Strelkova, E. Cheremisina, V. Chinaeva.

Second Prize

«Sputtering of Crystals and Metals under Irradiation by Heavy Ions».

Authors: V. Altynov, Yu. Cheblukov, A. Didyk,

A. Halil, A. Hofman, D. Ivanov, V. Semina, A. Suvorov, V. Robuk.

Encouraging Prizes

«Characteristics of Hyperons and Antihyperons Produced in Nucleon Beams».

Authors: E. Goudzovski, A. Zinchenko, I. Ivanchenko, V. Kekelidze, D. Madigozhin, Yu. Potrebenikov.

«Development of Facilities for the Production of SiO₂ Aerogel and the Study of Its Properties».

Authors: Yu. Akimov, V. Zrelov, L. Krupa, A. Puzynin, J. Ružička, S. Filin, A. Filippov, Yu. Kharzhev.

GRANTS

In 2003 a number of scientific projects at JINR were supported financially by the international foundations ISTC, INTAS, INTAS–RFBR, DFG–RFBR, CN–RS, CNRS–RGRB, CRDF and foundations of the Ministry of Industry, Science and Technology of the Russian Federation.

RFBR, together with the Research Society of Germany (DFG), financed seven grants. Together with the National Centre for Scientific Research of France (CNRS), RFBR financed one grant. Also, RFBR, together with BFBR (Belarus), financed one grant. Three grants of the President of the Russian Federation were

obtained by JINR staff in the framework of the programme of support for JINR leading scientific schools.

RFBR financed 75 grants for the competition «Initiative Projects», five grants for the competition «Projects of Establishment and Development of Information, Computing and Telecommunication Resources», one grant for the competition «Software for Supercomputers and Supercomputer Centres», two grants for the «Regional Competition 2002: the Moscow Region». Eleven grants were obtained for the competition «Programme of Support for Young Scientists».