

JURY'S RECOMMENDATIONS ON JINR PRIZES FOR 2022

For theoretical research papers

First prizes

“The anomalous Josephson effect”.

Authors: Yu. Shukrinov, I. Rahmonov, K. Kulikov, M. Nashaat, A. Mazanik.

“New methods in classical and quantum field theory with extended supersymmetry”.

Authors: E. Ivanov, I. Buchbinder, B. Merzlikin, K. Stepanyantz.

Second prize

“Superoperator approach to the theory of hot nuclei and astrophysical applications”.

Authors: A. Vdovin, J. Wambach, A. Dzhioev, D. Kosov, K. Langanke, G. Martínez-Pinedo, V. Ponomarev, Ch. Penev Stoyanov.

For experimental research papers

First prize

“SHE factory: first results”.

Authors: Yu. Oganessian, S. Dmitriev, F. Abdullin, D. Ibadullayev, A. Polyakov, R. Sagaidak, V. Utyonkov, Yu. Tsyganov, M. Shumeiko, N. Kovrizhnykh,.

Second prizes

“Magnetism of ferromagnet – superconducting heterogeneous layered structures”.

Authors: V. Aksenov, V. Zhaketov, Yu. Nikitenko, A. Petrenko, Yu. Khaidukov.

“New data on the spectra of superheavy isotopes of hydrogen ^7H , ^6H and the detection of spontaneous decay mode with the emission of 4 neutrons”.

Authors: A. Bezbakh, L. Grigorenko, A. Gorshkov, S. Krupko, I. Muzalevskii, E. Nikolskii, G. Ter-Akopian, A. Fomichev, V. Chudoba, P. Sharov.

For methodology, research and technology papers

First prizes

“The νGeN experimental setup for the investigation of reactor's antineutrino properties”.

Authors: V. Belov, I. Zhitnikov, S. Kazartsev, A. Lubashevskiy, D. Medvedev, D. Ponomarev, S. Rozov, K. Shakhov, E. Shevchik, E. Yakushev.

“Creation of systems of ion beam transfer to the Booster and Nuclotron synchrotrons of the NICA accelerator facility”.

Authors: A. Butenko, A. Galimov, S. Kolesnikov, O. Kunchenko, K. Levterov, V. Seleznev, A. Sidorov, A. Tuzikov, A. Fateev, V. Shvetsov.

Second prize

“The new gas-filled separator DGFRS-2”.

Authors: V. Bekhterev, G. Ivanov, A. Voinov, V. Konstantinov, D. Kuznetsov, O. Petrushkin, A. Podshibiakin, A. Popeko, D. Solovyev, V. Shubin.

For applied research and technology papers

First prize

“Hyperconverged “Govorun” supercomputer for the implementation of the JINR scientific program”.

Authors: D. Belyakov, A. Vorontsov, E. Druzhinin, M. Zuev, V. Korenkov, Yu. Migal, A. Moshkin, D. Podgainy, T. Strizh, O. Streltsova.

Second prizes

“Structural reorganization in a lipid membrane triggered by amyloid-beta peptide and temperature”.

Authors: O. Ivankov, N. Kučerka, T. Murugova, E. Ermakova, A. Rogachev, A. Kuklin, V. Skoi, Kh. Kholmurodov, D. Badreeva, E. Dushanov.

“Non-destructive microstructural analysis of promising cement materials for the construction of radioactive waste storage facilities and civil facilities: results of neutron radiography and tomography”.

Authors: S. Kichanov, K. Nazarov, D. Kozlenko, M. Balasoiu, A. Bekhzodjon, B. Savenko, I. Zel, M. Kenessarín.

Encouraging prizes

“Study of vector meson photoproduction processes in the ALICE (CERN) experiment”.

Authors: V. Pozdnyakov, Yu. Vertogradova, B. Romyantsev, E. Kryshen, J. Contreras Nuno, D. Horak.

“Applying the neutron activation analysis for the assessment of the levels of elements in mussels from different regions of the World Ocean for the characterization of connection with their environment”.

Authors: P. Nekhoroshkov, M. Frontasyeva, I. Zinicovscaia, D. Nikolayev, T. Lychagina, A. Pakhnevich, K. Vergel, O. Chaligava, D. Grozdov, J. Bezuidenhout.