

JURY'S RECOMMENDATIONS ON JINR PRIZES FOR 2023

For theoretical research papers

First prizes

“Exactly solvable models of statistical mechanics and quantum field theory”.
Authors: S. Dergachov, G. Sarkissian, V. Spiridonov.

“Mechanism of complete fusion by nucleon transfer in heavy ion collisions”.
Authors: A. Nasirov, G. Adamian, Sh. Kalandarov, G. Giardina, G. Mandaglio, B. Kayumov, O. Ganiev, G. Yuldasheva.

Second prize

“Theoretical support of experiments for colliders”.
Authors: A. Arbuzov, S. Bondarenko, Ya. Dydyshka, V. Yermolchyk, Yu. Yermolchyk, L. Kalinovskaya, A. Kampf, L. Rumyantsev, R. Sadykov.

Third prize

“Weak decays of heavy hadrons in light of search for new physics”.
Authors: G. Ganbold, M. Ivanov, A. Issadykov, V. Lyubovitskij, Tran Chien Thang, Zh. Tyulemissov.

For experimental research papers

First prizes

“Diffuse neutrino flux measurements with the Baikal-GVD neutrino telescope”.
Authors: I. Belolaptikov, K. Konishchev, A. Korobchenko, E. Pliskovskiy, B. Shaibonov.

“New isotope ^{276}Ds and its decay products ^{272}Hs and ^{268}Sg from the $^{232}\text{Th}+^{48}\text{Ca}$ reaction”.
Authors: F. Abdullin, A. Voinov, D. Ibadullayev, N. Kovrizhnykh, A. Polyakov, R. Sagaidak, D. Solovyev, V. Utyonkov, Yu. Tsyganov, M. Shumeiko.

Second prize

“Magnetic states of rare earth metals at high pressure”.
Authors: N. Golosova, D. Kozlenko, E. Lukin, B. Savenko, V. Yushankhai.

Third prize

“Search for light dark matter with NA64 at CERN”.
Authors: P. Volkov, S. Gninenko, T. Enik, G. Kekelidze, V. Kramarenko, N. Krasnikov, V. Matveev, D. Peshekhonov, V. Polyakov, K. Salamatin.

For methodology, research and technology papers

First prize

“The SFiNx detector system”.

Authors: A. Isaev, R. Mukhin, A. Yerebin, A. Kuznetsova, O. Malyshev, A. Popeko, Yu. Popov, B. Sailaubekov, A. Svirikhin, E. Sokol.

Second prizes

“Development of a software and algorithmic complex for the reconstruction, identification and selection of high-energy muons in the CMS experiment at the LHC”.

Authors: N. Voytishin, A. Zarubin, V. Karjavin, A. Kamenev, V. Korenkov, A. Lanev, V. Matveev, V. Palchik, V. Perelygin, S. Shmatov.

“Development and application of new experimental techniques at the complex ACCULINNA-2@U-400M”.

Authors: A. Bezbakh, S. Belogurov, M. Golovkov, A. Gorshkov, S. Krupko, E. Nikolskii, G. Ter-Akopian, A. Fomichev, V. Chudoba, P. Sharov.

Third prize

“On a ^3He refrigerator based on closed-cycle cryocooler cooling”.

Authors: A. Chernikov.

For applied research and technology papers

First prize

“The study of nanolayer materials and artificial diamonds by positron spectroscopy using a unique in Russia slow monochromatic positron injector”.

Authors: A. Sidorin, O. Orlov, V. Hilinov, I. Meshkov, E. Akhmanova, M. Eseev, I. Kuziv, R. Laptev, P. Horodek, K. Siemek.

Second prizes

“Neutron non-destructive structural analysis of cultural heritage materials: applied interdisciplinary studies”.

Authors: B. Abdurakhimov, B. Bakirov, A. Zhomartova, S. Kichanov, D. Kozlenko, E. Lukin, K. Nazarov, B. Savenko, I. Saprikina, V. Smirnova.

“Study of hardening mechanisms, residual stresses and microstructure of high-strength aluminum alloys”.

Authors: G. Bokuchava, Yu. Gorshkova, I. Papushkin, V. Turchenko, R. Fernández, G. González-Doncel, L. Millán, G. Bruno, G. Kronberger, P. Halodova.

Third prize

“Evaluation of the modern radiopharmaceuticals’ stability using nuclear spectrometric methods.”

Authors: D. Filosofov, E. Kurakina, A. Velichkov, D. Karaivanov, O. Kochetov,
A. Salamatina, V. Timkin, J. Khushvaktov.