

## **JINR PRIZES FOR 2019**

### **For theoretical research papers**

#### **First prize**

“Theory of groups and symmetries. Representations of groups and Lie algebras. Applications.”

Authors: A. Isaev, V. Rubakov.

#### **Second prizes**

“Study of multinucleon transfer reactions as a method for production of new heavy and superheavy nuclei”.

Authors: A. Karpov, V. Saiko.

“Ab initio quantum-chemical approach to the study of the crystal field and quantum magnetism in transition metal oxides”.

Authors: L. Siurakshina, V. Yushankhai, P. Fulde, L. Hozoi, J. van den Brink.

### **For experimental research papers**

#### **First prizes**

“Measurement of the energy spectra of reactor antineutrinos in the DANSS project”.

Authors: V. Belov, V. Brudanin, I. Zhitnikov, S. Kazartsev, A. Kuznetsov, D. Medvedev, M. Fomina, E. Shevchik, M. Shirchenko, Yu. Shitov.

“Detailed study of the structure of  ${}^6\text{Be}$  in the charge-exchange reaction  ${}^1\text{H}({}^6\text{Li}, {}^6\text{Be})\text{n}$ ”.

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

#### **Second prize**

“Study of rare and search for forbidden decays of charged kaons”.

Authors: E. Goudzovski, V. Kekelidze, D. Madigozhin, M. Misheva, Yu. Potrebenikov, S. Shkarovskiy.

### **For methodology, research and technology papers**

#### **First prize**

“Development, construction and commissioning of the DC-280 cyclotron of the Factory of superheavy elements at FLNR, JINR”.

Authors: B. Gikal, G. Gulbekian, S. Dmitriev, I. Ivanenko, N. Kazarinov, I. Kalagin, N. Osipov, S. Pashchenko, N. Pchelkin, V. Semin.

## Second prizes

“Innovative method of increasing the light collection from scintillation detectors of the Mu2e experiment veto system”.

Authors: A. Artikov, Ju. Budagov, I. Vasiliev, V. Glagolev, Yu. Davydov, A. Simonenko, Yu. Kharzheev, D. Chokheli, E. Dukes, C. Group.

“First stage of the BM@N GEM central tracking system”.

Authors: A. Galavanov, S. Vasiliev, E. Kulish, M. Kapishin, A. Makankin, A. Maksymchuk, S. Khabarov.

## **For applied research and technology papers**

### First prizes

“Application of neutron diffraction to study structural and microstructural transformations of Li-ion electrode materials during operation”.

Authors: I. Bobrikov, A. Balagurov, N. Samoylova, C. Sumnikov, O. Ivanshina, R. Vasin.

“Research on molecular damage formation in genetic structures of human and mammalian cells after exposure to low and intermediate-energy accelerated heavy ions”.

Authors: A. Boreyko, T. Bulanova, M. Zadnepryanets, E. Krasavin, E. Kruglyakova, E. Smirnova, G. Timoshenko.

### Second prize

“Neutron radiography and tomography at the pulsed high-flux IBR-2 reactor: development of the experimental facility and results of the interdisciplinary applied research”.

Authors: D. Kozlenko, S. Kichanov, A. Belushkin, E. Lukin, K. Nazarov, A. Rutkauskas, G. Bokuchava, B. Savenko, I. Saprikina.

## **Encouraging prize**

“Features of population of isomeric states in reactions with weakly bound nuclei”.

Authors: N. Skobelev, Yu. Penionzhkevich, S. Lukyanov, Yu. Sobolev, V. Burjan, J. Mrázek, E. Šimečková, N. Demekhina.