



PREFACE

We would like to offer the readers the scientific activity report of the Frank Laboratory of Neutron Physics for 2017. The first part of the report presents a brief review of the experimental and theoretical results achieved in the main scientific directions – condensed matter physics, neutron nuclear physics, applied research and development and creation of elements of neutron spectrometers for condensed matter investigations. The second part includes the reports on the operation of the modernized IBR-2 pulsed reactor, the development of the IREN neutron source and researches carried out on EG-5 facility. A list of publications for 2017, the information regarding the seminars and conferences organized in FLNP and a statistical view on the FLNP personnel structure are presented as well.

In 2017 the main achievements of the Laboratory were:

- successful fulfillment of the user program at the IBR-2 spectrometers;
- development of spectrometer complex at the IBR-2 reactor;
- development of IREN facility.

In 2017 the IBR-2 reactor operated for physical experiments for 2471 hours, the IREN facility 1049 hours and EG - 515 hours.

FLNP has cooperation agreements in the field of neutron investigations with almost 200 scientific institutes and universities from more than 40 countries from all over the world. A significant contribution to this cooperation is made by the JINR Member States.

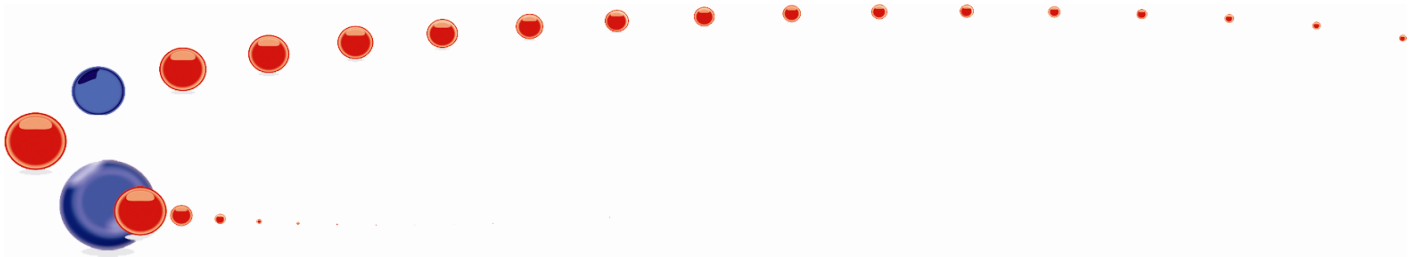
The FLNP staff consists of more than 500 employees in this about 30 % younger than 35 years of age. The scientific staff includes 106 Ph.D. and 24 D.Sc. researchers and more than 100 researchers and specialists from 18 of the JINR Member States (besides the Russian Federation) and associated members.

The organization of annual conferences and schools covering all FLNP research fields helps to recruit young specialists — one of the top priority tasks of the FLNP Directorate.

In 2017 FLNP celebrated its 60th anniversary. Our history is full of outstanding achievements, names of talented scientists, engineers and employees JINR is rightly proud of. The establishment of the Laboratory is connected with such prominent physicists as D.I. Blokhintsev, I.M.Frank, F.L.Shapiro. The constellation of pulsed neutron sources of IBR, IBR-30, IBR-2 developed by FLNP researchers provided JINR with leading positions in the field of neutron research and gave an opportunity to implement a series of contributions that went down to history forever.



V.N. Shvetsov
Director



Members of the Directorate of the Frank Laboratory of Neutron Physics:



SHVETSOV
Valeryi
Nikolaevich
Director
since 2013

Deputy Directors for Science



CULICOV
Otilia
Ana
since 2013



LYCHAGIN
Egor
Valerievich
since 2013



KUČERKA
Norbert
since 2014



KOZENKOV
Sergey
Vyacheslavovich
Deputy Director
for General Issues
since 1989



VINOGRADOV
Alexander
Vital'evich
Chief Engineer
since 2007

CHUDOBA
Dorota
Marta
Scientific secretary
since 2013

