



Contribution ID: 2

Type: **Invited talk (+ poster)**

## Development of neutron detectors for the spectrometers of the IBR-2 reactor

*Monday, 14 May 2018 11:45 (30 minutes)*

The different types of instruments for condensed matter investigation on the external beams of the IBR-2 pulsed research reactor in Frank Laboratory of Neutron Physics of Joint Institute for Nuclear Research (FLNP JINR) require different neutron detectors for them. This leads to the necessity of developing a variety of detectors in the Laboratory that are used in experiments. The neutron detection systems developed and used at the instruments on the external beams of the IBR-2 pulsed research reactor (gaseous  $^3\text{He}$  based detectors: 1D and 2D detectors (MWPC), “ring” detectors;  $^6\text{Li}$  scintillator based detectors with wavelength shifting fibers, detectors and monitors with solid  $^{10}\text{B}$  converters etc.) as well as the current status and projects carried out at FLNP on development of detectors and data acquisition systems will be presented.

**Primary authors:** Dr KULIKOV, Sergey (Joint Institute for Nuclear Research); Mr CHURAKOV, Andrey (Joint Institute for Nuclear Research); KRUGLOV, Vladimir (Joint Institute for Nuclear Research)

**Presenter:** Dr KULIKOV, Sergey (Joint Institute for Nuclear Research)

**Session Classification:** Session I: Engineering for advanced instrumentation: Detectors