**Concepts of new neutron source at FLNP and program of experiments**

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**Annotation**

The service life of the IBR-2 reactor, one of the leading pulse neutron sources in the world, is expected to end in the mid-30s. Therefore, Frank Laboratory of Neutron Physics started developing a new source since 2015. During the last 3 years some reports with information about this work were presented at PACs for Condensed Matter Physic.

In the proposed report possible source concepts [1, 2] will be presented as well as assumed parameters of the sourceand time scale of the source creation as we see it.

The scientific program for condensed matter physics was discussed widely. Some experiments fornuclear and particle physics look reasonable for realization at the new source. We would like to have UCN and VCN neutron sources art new facility.Now we would like to have a wide discussion on new promising/perspective physics ideas related to the source and its components utilization in the field of particle and nuclear physics.

**References**

1. Aksenov, V.L., et al., http://flnph.jinr.ru/images/content/Books/Blok.pdf
2. Vinogradov A.V. et al. JINR preprints P13-2018-40 (2018) in Russian