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## VCN Test Facility as the Initial Phase of the UCN Facility Development

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A new high-brilliance ultracold neutron (UCN) source is planned to be created for the FLNP JINR pulsed reactor. It is planned to carry out a series of investigations using VCNs, which are essential for the design of the main elements of this UCN source. For this purpose, a test VCN channel at the third channel of the IBR-2M reactor will be built. This will allow us to obtain a VCN beam with a wide range of velocities. It has been estimated that the flux of desired neutrons with velocities of  $20 \pm 1$  m/s will be approximately  $10^5$  n/s in ideal case. The source will be operational for a relatively long period of work on the project and will be replaced by the main source at the end. The report is devoted to the design of the VCN test channel.

**Primary author:** POPOV, Alexander (JINR)

**Co-authors:** FRANK, Alexander (JINR); KULIN, German (JINR); KURYLEV, Vladimir (JINR); SHPILEVSKAYA, Victoria (JINR); ZAKHAROV, Maxim (JINR)

**Presenter:** POPOV, Alexander (JINR)

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