
**PLENARY SESSION 2 : DEVELOPMENT OF NEUTRON SCATTERING
TECHNIQUES AND INSTRUMENTS**

COLD NEUTRONS STORAGE AT PULSED SOURCE

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Proposed a cold neutrons circular storage for projected at JINR a pulsed periodic reactor NEPTUNE. The relations for calculation of storage parameters, neutron current and holding time are received. It is shown the holding time can be increased significantly in compare a neutron flight time for distance which is compared with storage sizes. Possibilities are considered for conducting an experiment on measurement of probability of mirror neutrons formation. It is shown the measured minimal probability value for reactor NEPTUNE with radius 50 m is less on order than the probability for 300 m flight distance beam experiment at ESS.