

The Development of Setup for a Study of p-Even Correlations in p-Wave Resonances

Ergashov A., Kopach Y.N., Kuznetsov V.L., Mitsyna L.V., Rebrova N.V.,
Sedyshev P.V.

Frank Laboratory of Neutron Physics, JINR, Dubna

A design of a setup for studying p-even correlations in p-wave resonances on the 4th channel of the IREN resonant neutron source is presented, and a prototype of the setup is assembled. The ongoing research is aimed at searching for the violation of T-invariance in (n, γ)-reactions.

Time-of-flight spectra were measured for a number of nuclei. Preliminary measuring results have shown that there is a possibility to study p-even correlations in p-wave resonances of lanthanum, bromine, and silver.