

**THE STUDY SECONDARY GAMMA-TRANSITIONS FROM  $^{155}\text{Gd}(n,\gamma)^{155}\text{Gd}$  REACTION FOR  
DIFFERENT FILTERED NEUTRON BEAM ENERGIES**

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The theoretical and experimental estimations of the possibility to obtain the information about the excited level spins from secondary capture  $\gamma$ -ray studies for different quasimonoenergetic neutron beam energies were fulfilled. The preliminary experimental results confirm the dependence of the secondary  $\gamma$ -ray intensities ratios, taken for the different neutron energies, from the spin of decaying level, and the possibility to describe this effect using the  $\gamma$ -cascade model.