## JINR Association of Young Scientists and Specialists Conference "Alushta-2025"



Contribution ID: 10

Type: not specified

## Response of the LaBr3 scintillation detector on the 14.1 MeV neutrons irradiation

Monday 9 June 2025 10:30 (10 minutes)

Gamma-detectors based on the LaBr3 crystals become more and more popular in nuclear research because of outstanding energy and timing resolutions. Their application in setups dedicated for neutron-induced reaction research requires information about processes which take place in LaBr3 crystals during neutron irradiation. In this report we present yields of gamma-rays emitted in neutron-induced reactions in LaBr3 which forms the "instant" component of the detector's response on neutron irradiation. Data was extracted by quite original way from measurements on the new configuration of the TANGRA setup which includes LaBr3 and HPGe detectors. In the data processing procedure one LaBr3 detector played a role of the irradiated sample. Obtained results and data processing details will be presented.

Summary

**Presenter:** ФЕДОРОВ, Никита **Session Classification:** Section Talks

Track Classification: Sectional talks: FLNP