

Study of the scintillation detector prototype for the upgraded polarimeter at the Internal Target Station at the Nuclotron

The prototype of a scintillation detector with various types of front-end electronics (FEE) have been developed. These types are with silicon photomultipliers (SiPM) readout. The paper presents the results of studies of a prototype scintillation detector, discusses the estimation of the time resolution. The presented prototype will allow obtaining and evaluating polarization observables measurements (beam polarization stability, polarization magnitude, etc.) at the polarimeter of the DSS project as part of the implementation of the first stage of the spin program at SPD NICA [1-3].

The speaker is a student or young scientist

Yes

Section

1. Nuclear structure: theory and experiment

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