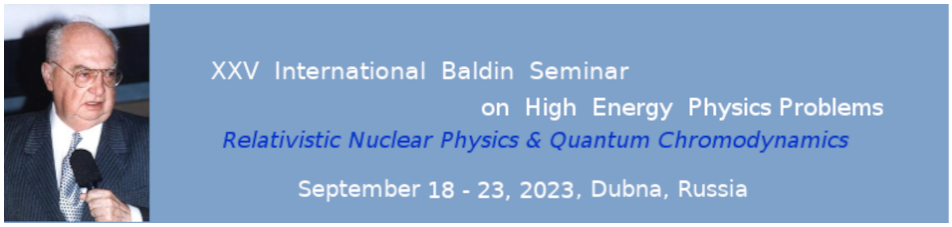


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# Simulation of silicon detectors of the MiniSPD setup

*Thursday, 21 September 2023 15:30 (20 minutes)*

The main objective of the proposed experiment is the comprehensive study of the unpolarized and polarized gluon content of the nucleon. In accordance with the possible configuration of the SPD setup, our collaboration manufactured the MiniSPD stand. At present, this stand is used for testing SPD detector prototypes with cosmic muons. Using GEANT4 software and ROOT framework, we have been carried out Monte-Carlo simulation of the three modules of two-sided silicon plates of MiniSPD stand for two cases: with and without taking into account operation of the scintillator triggers. We illustrate the solution of the alignment task which is the important part of any experiment. Our simulation silicon detectors are agreed well with experimental data on cosmic muons.

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