

Study of the detection of Λ (anti- Λ)-hyperons in the SPD

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The Spin Physics Detector (SPD) experiment at the Nuclotron-based Ion Collider fAcility (NICA) is an upcoming project with an extensive physics program aimed at studying the spin structure of the nucleons. The experiment will record data from the collisions of polarized proton and deuteron beams. One of the important particles produced in such collisions is the Λ -hyperon. It is noteworthy because it has already been studied in detail and its polarization can indicate the polarization of the original process. At the present stage of the experiment, one of the main tasks is to study the detection of the particles of interest produced in the collisions at the SPD and to optimize the parameters for their selections. This work presents the results of the calculations of detection efficiencies of the Λ and anti- Λ hyperons.

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