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Spin Physics Research INfrastructure and Technologies at NICA (SPRINT@NICA).

The study of the spin effects and polarization phenomena in hadronic reactions is the traditional scientific direction of JINR. Nowadays Spin Physics Detector [1] at NICA as well as new spin projects at the fixed targets [2,3] at Nuclotron are in preparation. This research program requires the development of high intensity polarized beams, polarized targets, beam and focal polarimetry, systems of the spin manipulation and control. The main goal of the SPRINT@NICA project is to provide the research infrastructure and to develop the technologies for the current and planned spin studies at Nuclotron/NICA. The spin transparency regime for polarized protons and deuterons over whole energy range of Nuclotron and NICA is discussed [4,5]. Further development of the Source of Polarized Ions [6] with corresponding deuteron and proton beam polarimeters is planned. The extension of the spin program to the search of axion-like particles [7] and measurement of the EDM with beams of polarized protons and deuterons [8] is discussed.

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