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Local Polarimetry with Beam-Beam Counters at the SPD Experiment

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The Beam-Beam Counters (BBC) are components of the Spin Physics Detector at the NICA collider. They are designed to perform local polarimetry of the colliding polarized proton and deuteron beams and luminosity control in the beam interaction region. Here, the MC simulation of the BBC operation for proton-proton collisions is presented. The simulations are performed using the SpdRoot framework and the center-of-mass energy of 27 GeV. The results presented include the estimation of the magnetic field influence on the inclusive charged particle production asymmetries and the BBC. The selection of the pp-elastic scattering events in the BBC is also discussed.

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