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Global polarization of lambda hyperons and its correlation with directed flow in the MPD experiment.

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Global hyperon polarization and anisotropic transverse flow are important observables for studying the properties of the strongly interacting matter produced in relativistic heavy ion collisions. The former provides information about the initial angular momentum in the non-central collisions and the latter contains the information about the early evolution of the overlap region and the equation of state. Investigation of both effects at NICA energies is an important goal of the MPD experiment. In this work we investigate the global polarization for lambda hyperons and its correlation with the directed flow of the strongly interacting matter created in the Bi+Bi collisions at 9.2 GeV produced with the PHSD event generator.

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