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Spin Physics Detector at NICA

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The Spin Physics Detector is one of two large setups at the NICA collider under construction at JINR. The ultimate goal of the studies at SPD is the measurement of different spin observables in polarized proton-proton and deuteron-deuteron collisions sensitive to the polarized gluon structure of the nucleon at the luminosity up to $10^{*}32\ cm\ {-2}s\ {-1}$ and up to 27 GeV in the center of mass. SPD will consist of the superconducting magnetic system, silicon tracker, straw mini-drift tubes tracker, time-of-flight system, electromagnetic "shashlyk"- type calorimeter, muon (range) and local-polarimetry systems. The high performance free-streaming DAQ system will be able to operate at the collision rate up to 4 MHz.
The possibilities of the measurements at the first phase of SPD experiment will be discussed.

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