The PHENIX Spin Program: Recent Results and Future Prospects

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The PHENIX spin program utilizes polarized protons in the Relativistic Heavy Ion Collider (RHIC) at Brookhaven National Laboratory to study the spin structure of the proton. We study different aspects of the nucleon spin structure by using longitudinal or transversely polarization beams and measuring single and double asymmetries for a variety of channels (e.g. π^0, γ, and μ). Substantial improvements in the polarization and luminosity of polarized protons in the past two runs at RHIC have led to large increase of statistics compared to our first measurements and have opened up new channels. We will review recent results, show new results, and discuss future prospects.