

Abstract Submitted
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Measurement of Double Longitudinal Spin Asymmetry in Heavy Flavor Production at $\sqrt{s} = 200\text{GeV}$ at RHIC XIAORONG WANG¹, New Mexico State University, PHENIX COLLABORATION — One of the main goals of the RHIC-SPIN program is to determine the contribution of gluons to the proton spin. At RHIC energies, The heavy quark (charm and beauty) production is expected to be dominated by gluon-gluon interactions, so a measurement of the double longitudinal spin asymmetry A_{LL} in heavy quark production in polarized p+p collisions hence allow us to directly probe the polarized gluon distribution inside the proton. The PHENIX experiment collected 3.5 pb^{-1} of data with beam polarization $\sim 50\%$ and 7.5 pb^{-1} of data with beam polarization $\sim 60\%$ in the years 2005 and 2006, respectively. In this talk, we present the latest results on an A_{LL} measurement for J/ψ and open charm production measured by the PHENIX detector.

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