

Abstract Submitted
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Measurements of Double Longitudinal Spin Asymmetry in Dimuon Production at RHIC MING LIU, Los Alamos National Lab, PHENIX COLLABORATION — One of the main goals of RHIC-SPIN program is to determine the contribution of the polarized gluons to the proton spin. At RHIC energy, it is expected heavy quark (charm and beauty) production is dominated by gluon-gluon interactions, so measurement of double longitudinal spin asymmetry of heavy quark production in the polarized p+p collisions will allow us to directly probe the polarized gluon distribution inside the proton. The PHENIX experiment collected 7.5 pb^{-1} (beam polarization about 60%) data from year 2006 run, and successfully reconstructed about 30K dimuon J/Ψ candidates as well as 100K back-to-back dimuons with invariant mass above 5 GeV. These two probes cover very different kinematic ranges: for the forward J/Ψ production, the covered x ranges are, $x_1 \sim 0.2$ and $x_2 \sim 10^{-3}$; for the back-to-back dimuons, $x_1 \sim x_2 \sim 0.1$. In this talk, we present the current status of A_{LL} measurements in the dimuon channels from the PHENIX experiment.

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