

Abstract Submitted
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Transverse single spin asymmetry for dihadron production in polarized $\sqrt{s} = 200$ GeV pp collisions at PHENIX RUIZHE YANG, University of Illinois, PHENIX COLLABORATION — Due to the chiral-odd nature of the transverse quark spin distribution functions of the proton, they can only be accessed when coupled to another chiral-odd function such as itself in Drell-Yan, the Collins fragmentation function in inclusive hadron production, or the di-hadron fragmentation function (also called interference fragmentation function) in di-hadron production. Using the PHENIX detector at the Relativistic Heavy Ion Collider (RHIC), the single spin asymmetry of di-hadron production is being studied in transversely polarized proton proton collisions. This single spin asymmetry can be used to extract quark transversity distribution functions with the interference fragmentation function which will be measured in e^+e^- collisions by the BELLE detector at KEK. First data for this measurement was collected in 2006, with 2.7 pb^{-1} integrated luminosity and 57% polarization. The current status of the di-hadron single spin asymmetry will be reported.

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