Contribution ID: **174** Type: **Talk**

Recent spin results from PHENIX

Wednesday 31 August 2022 15:50 (20 minutes)

Spin structures are important properties of nucleons. At the Relativistic Heavy Ion Collider (RHIC), the PHENIX experiment probed longitudinal spin structures by colliding two longitudinally polarized protons ($\vec{p}+\vec{p}$) and measuring its spin asymmetry (A_{LL}) of a variety of final states. Colliding a transversely polarized proton with a nucleon/ion ($\vec{p}+p/A$) provides similar access to the transverse single spin asymmetry (A_N). Direct photon, hadron, and jet production are the common channels used in measurements. Compared with hadron and jet production, direct photon production has little fragmentation contributions and is taken as the "golden" channel. On the other hand, hadron and jet production has larger statistics. Another channel is the forward neutron production, which is sensitive to the Regge behavior and the electromagnetic interactions. In this talk, I will highlight the recent PHENIX A_{LL} and A_N measurements from the direct photon, hadron, jet, and forward neutron production.

Is this abstract from experiment?

Yes

Name of experiment and experimental site

PHENIX detector using RHIC run of year 2013

Is the speaker for that presentation defined?

Yes

Details

Dr. Zhongling Ji from UCLA for the PHENIX Collaboration

Internet talk

Yes

Author: Dr JI, Zhongling (UCLA)

Presenter: Dr JI, Zhongling (UCLA)

Session Classification: High Energy Particle Physics

Track Classification: Main topics: High Energy Particle Physics