Contribution ID: **157** Type: **not specified**

# Cross-sections and SSAs at high-xF at RHIC by BRAHMS

*Wednesday 18 April 2007 12:10 (20 minutes)*

Single transverse spin asymmetries (SSA) in transversely polarised pp reactions at the energy regime where pQCD is applicable are expected to be negligibly small in the lowest-oredr QCD approximation, whereas experimentally large SSAs have been observed at high xF. Recently, new measurements of SSAs have been available from semi-inclusive deep-inelastic scattering and transversely polarised pp at RHIC providing more insight into th e fundamental mechanisms of SSAs as well as the relevant hadron structure.
The BRAHMS experiment at RHIC has unique capabilities to explore the high xF kinematic region with particle identification. Measurements of cross sections and single-spin asymmetries of identified charged hadrons from transversely polarised proton collisions at sqrt(s)=62.4 and 200 GeV are presented. The results are discussed in the context of theoretical models based on pQCD. The energy and flavour dependent SSAs combined with the cross sections at high xF bring new insight into the pQCD description of partonic dynamics at RHIC.

**Author:** LEE, J.H. (BNL)

**Co-author:** Dr VIDEBAEK, F. (Brookhaven National Laboratory)

**Presenter:** LEE, J.H. (BNL)

**Session Classification:** Spin Physics

**Track Classification:** Spin Physics