Contribution ID: **204** Type: **not specified**

Single spin asymmetries of forward neutron production in polarized p+p and p+A collisions at sqrt(s)=200 GeV

Tuesday, April 12, 2016 11:00 AM (15 minutes)

In high-energy hadron collisions, most energy goes into the forward region.
However, particle production mechanisms in the forward region are not well
understood as perturbative QCD is not applicable at small momentum transfers.
We study single spin asymmetries (A_N) of forward neutron production
in the PHENIX experiment using a transversely polarized proton beam.
In 2015, we took data for p + A collisions for the first time with
Au and Al beams at sqrt(s_NN)= 200 GeV and observed a surprising A dependence.
The results will be presented in the conference together with discussions
on possible mechanisms that could explain the A_N results of
forward neutron production.

Primary author: Dr TANIDA, Kiyoshi (Japan Atomic Energy Agency)

Presenter: Dr TANIDA, Kiyoshi (Japan Atomic Energy Agency)

Session Classification: WG6 Spin Physics

Track Classification: Spin Physics