

Abstract Submitted  
for the DNP08 Meeting of  
The American Physical Society

Sorting Category: 8. (E)

**Measurements of Direct Photon Double Longitudinal Spin Asymmetry at Large Rapidity** PAUL BOURGEOIS, Amherst College, PHENIX COLLABORATION — Direct photon production in polarized p-p collisions is expected to be the cleanest measurement of the gluon polarization. Current measurements using inclusive pion production, in the PHENIX central arms, suggest a small contribution from the gluons to the proton spin in the presently accessible Bjorken  $x$  range  $x_{Bj} > 10^{-2}$ . The addition of the Nose Cone Calorimeter (NCC) in the large rapidity  $1 < \eta < 3$  will allow PHENIX to access  $x_{Bj} \sim 10^{-3}$ . In this talk I will present the prospects of measuring direct photon double longitudinal spin asymmetry  $A_{LL}$  employing the NCC.

Prefer Oral Session  
 Prefer Poster Session

Paul Bourgeois  
psbour@bnl.gov  
Amherst College

Date submitted: 30 Jun 2008

Electronic form version 1.4