

Abstract Submitted
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Inclusive π^0 Production in Polarized pp Collisions using the STAR Endcap Calorimeter JASON WEBB, Valparaiso University, STAR COLLABORATION — The two-spin helicity asymmetry for inclusive π^0 production in polarized pp collisions can provide constraints on the gluon contribution to the spin of the proton with sensitivity comparable to that attainable with full jet reconstruction [1]. In 2006, the STAR experiment accumulated $\approx 6pb^{-1}$ of data with beams longitudinally polarized ($\bar{P} \approx 60\%$) at the Relativistic Heavy Ion Collider. Measurements of $A_{LL}(\pi^0)$ in the range $1 < \eta < 2$ provide information about a different mix of partonic subprocesses and are subject to different experimental uncertainties than mid-rapidity jet measurements, providing an important cross check. Status of the analysis of $A_{LL}(\pi^0)$ measured using the STAR Endcap Calorimeter [2] is discussed.

[1] B. Jager, M. Stratmann and W. Vogelsang, Phys. Rev. **D** 70, 034010 (2004) [arXiv:hep-ph/0404057].

[2] K. H. Ackermann et al. [STAR Collaboration], Nucl. Instrum. Meth. A 499, 624 (2003).

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