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Inclusive π^0 Production in Longitudinally Polarized pp Collisions at $\sqrt{s}$=200 GeV Using the STAR Endcap Electromagnetic Calorimeter WEIHONG HE, Indiana University, STAR COLLABORATION — Measurement of the double-spin asymmetry A_{LL} for inclusive π^0 production in polarized pp collisions can provide important constraints on gluonic contributions to the proton's spin.[1] The STAR Endcap Electromagnetic Calorimeter (EEMC) is well suited for these studies, providing full azimuthal coverage for $1.086 \leq \eta \leq 2$, and with separate readout of two pre- and one post-shower layers, and a fine grain scintillator-based shower maximum detector (SMD) that can distinguish between single photons or electrons, charged hadrons, and neutral mesons (π^0's and η's) via the observed transverse shower profile. The EEMC also provides fast triggering on significant energy deposition in individual towers, trigger patches, or jet patches ($\Delta\eta \times \Delta\phi \approx 0.007, 0.06, 1$, respectively). Details of the π^0 reconstruction algorithm employed, and the current status of analysis of the 2006 longitudinally polarized pp data set (sampled luminosity ≈ 3.5 pb^{-1}) will be presented.
[1] B. Jager, M. Stratmann and W. Vogelsang, Phys. Rev. D **70**, 034010 (2004) [arXiv:hep-ph/0404057].

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