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Double Longitudinal Asymmetry in Jet k_t Measured in Di-hadron Correlations in Polarized p+p Collisions at $\sqrt{s}$= 200GeV in the PHENIX Experiment at RHIC ROBERT HOBBS, University of New Mexico, PHENIX COLLABORATION — By measuring the azimuthal correlations between two high p_t hadrons, one can extract jet properties such as the fragmentation transverse momentum j_t and the "intrinsic" transverse momentum k_t. In longitudinally polarized p+p collisions, differences in the extracted average k_t for like and un-like helicity combinations (double asymmetry) may give information on the relationship between the polarization and the partonic transverse momentum, and thus the orbital angular momentum of the hard-scattered partons. This method is similar to a technique previously suggested by Meng Ta-chung et al. in the Drell-Yan channel. In this talk we present the physics technique, the analysis method and the current status of the analysis for π^0 - hadron azimuthal correlations in PHENIX with data from RHIC in 2003, 2004 and 2005.

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