Abstract for an Invited Paper for the HAW09 Meeting of The American Physical Society

Transversity at HERMES

STEPHEN GLISKE, University of Michigan

A brief introduction to the transversity distribution function, denoted δq or h_1 , will be presented. Access to h_1 can be gained by measurement of Fourier moments of single-spin asymmetries in semi-inclusive production of mesons on a transversely polarized hydrogen target. Other transverse momentum dependent functions can also be accessed through various azimuthal moments. Preliminary results from HERMES will be presented. The experimental results from COMPASS will also be shown for comparison. An additional observable, the pion yield difference, will also be presented, as this observable has negligible contribution from vector meson decay.