

Abstract Submitted  
for the SES17 Meeting of  
The American Physical Society

**Extraction of unpolarized TMD widths using collinearity criteria with HERMES multiplicities in semi-inclusive deep-inelastic scattering**  
MASON ALBRIGHT, Pennsylvania State University — Using a Gaussian ansatz for the transverse momentum dependence of unpolarized transverse momentum dependent (TMD) functions, we analyze HERMES multiplicities in semi-inclusive deep-inelastic scattering (SIDIS). We discuss the importance of data selection in conducting the fit, where, in particular, we implement for the first time new collinearity criteria that allow us to better separate the current and target fragmentation regions. We compare our parameters to previous extractions in order to better interpret our results. We also give an outlook on what impact this criterion can have on on-going and future experiments.

Mason Albright  
Pennsylvania State University

Date submitted: 08 Nov 2017

Electronic form version 1.4