## Abstract Submitted for the DNP20 Meeting of The American Physical Society

THE ORIGIN OF HADRON PRODUCTION IN DEEP INELASTIC SCATTERING¹ SCOTT DOLAN, ALEXEI PROKUDIN, LEONARD GAMBERG, Pennsylvania State University — We discuss the impact of data selection on the determination of non-perturbative transverse momentum dependence in semi-inclusive deep-inelastic scattering. In particular, we implement the recently introduced criteria that allow selection of data predominantly in the current fragmentation region, and apply this framework to pion and kaon multiplicity data from HERMES and COMPASS experiments. We compare the resulting unpolarized transverse momentum dependent distributions with previous extractions, and discuss the potential impact of the data selection criteria on future experiments at Jefferson Lab 12 and the Electron-Ion Collider.

<sup>1</sup>Work partially supported by the NSF under Grant No. PHY-2012002, and the U.S. Department of Energy under grant No. DE-FG02-07ER41460, and within the framework of TMD topical collaboration.

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Date submitted: 29 Jul 2020 Electronic form version 1.4