

Abstract Submitted
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SIDIS Single Pion Multiplicity with CLAS12¹ GIOVANNI ANGELINI, The George Washington University, CLAS COLLABORATION COLLABORATION — In the current fragmentation region, the cross section of electroproduced hadrons in Semi-Inclusive Deep Inelastic Scattering (SIDIS) can be expressed as convolution of two universal functions: the partonic distribution functions and the fragmentation functions. The former describing properties of the parton within the nucleon, the latter describing its hadronization process. When the SIDIS cross section is normalized to the deep inelastic scattering cross section - which can be parametrized only in terms of partonic distribution functions - one refers to this observable as multiplicity. In this talk, the preliminary multiplicities of electroproduced pions in SIDIS on an unpolarized hydrogen target are shown by using the JLab CLAS12 data. The high luminosity achieved at JLab and the wide kinematic range covered by the CLAS12 spectrometer have allowed for the extraction of this observable in a multidimensional fashion.

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