Hadron Mass Effects for Kaon Production on deuteron\textsuperscript{1} JUAN GUERRERO, Hampton University/Jefferson Lab — The spin-independent cross section for semi-inclusive lepton-nucleon scattering are derived in the framework of collinear factorization, including the effects of the target and produced hadron masses at small momentum transfer squared $Q^2$. At leading order, the cross section factorizes into products of parton distributions and fragmentation functions evaluated in terms of new, mass-dependent scaling variables. This talk focuses on Kaon production at HERMES and COMPASS kinematics. In particular, hadron mass corrections for integrated kaon multiplicities measured by the two collaborations are shown to sizeably reduce the apparent large discrepancy between the results for both experiments.

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