

Abstract Submitted
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New Developments on Target Mass Corrections MATTHEW BROWN, Arizona State University, JLab, WALLY MELNITCHOUK, JLab — We consider the consistency of factorization of deep-inelastic nucleon structure functions in the presence of target mass corrections (TMCs) at low Q^2 . After reviewing the standard operator product expansion derivation of TMCs in both x - and moment-space, we compare the results with those based on collinear factorization and assess their convergence. We discuss the limitations of the various TMC prescriptions, including attempts to alleviate the threshold problem for the behavior of structure functions as $x \rightarrow 1$. The results are used to analyze recent high-precision structure function data from experiments at Jefferson Lab.

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