

XXVIII International Workshop on Deep-Inelastic Scattering and Related Subjects



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Factorized approach to radiative corrections for inelastic lepton-hadron collisions

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We propose a new factorized approach to QED radiative corrections (RCs) in inclusive and semi-inclusive lepton-hadron deep-inelastic scattering. The method allows the systematic resummation of the logarithmically enhanced into factorized lepton distribution and fragmentation (or jet) functions that are universal for all final states. The new approach provides a uniform treatment of RCs for the extraction of parton distribution functions, transverse momentum dependent distributions, and other partonic correlation functions from lepton-hadron collision data.

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