

# Deep Inelastic Scattering events for photon and heavy boson TMDs in the Parton Branching Method

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Deep Inelastic Scattering (DIS) events at HERA are the most precise DIS measurement to date, which constitutes an important tool to study transverse momentum dependent (TMD) parton distribution functions. In this study, we introduce standard DIS Monte Carlo events recreating HERA conditions, and apply their cross section as a constraint for both photon and heavy boson TMDs in the Parton Branching Method