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Leading proton production in deep inelastic scattering at HERA

Content :
The semi-inclusive reaction e+p -> e+Xp was studied with the ZEUS detector at HERA using an integrated luminosity of 12.8 pb-1. The final state proton, which was detected with the ZEUS leading proton spectrometer, carried a large fraction of the incoming proton energy, x_L > 0.32, and its transverse momentum squared satisfied p_T2 < 0.5 GeV2; the exchanged photon virtuality, Q2, was greater than 3 GeV2 and the range of the masses of the photon-proton system was 45 < W < 225 GeV. The leading-proton production cross section and rates are presented as a function of x_L, p_T2, Q2 and the Bjorken scaling variable, x.

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Comments :

These results will be presented on behalf of the ZEUS Collaboration