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# Measurement of D+- and D0 Production in Deep Inelastic Scattering Using a Lifetime Tag at HERA

Content :

The production of D+- and D0 mesons has been measured with the ZEUS detector at HERA using an integrated luminosity of 133.6 pb-1. The measurements cover the kinematic range 5 < Q2 < 1000 GeV2, 0.02 < y < 0.7, 1.5 < pT(D) < 15 GeV and |eta(D)| < 1.6. Combinatorial background to the D meson signals is reduced by using the ZEUS microvertex detector to reconstruct displaced secondary vertices. Production cross sections are compared with the predictions of next-to-leading-order QCD which is found to describe the data well. Measurements are extrapolated to the full kinematic phase space in order to obtain the open-charm contribution, F2(ccbar), to the proton structure function, F2.

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Comments :

These results will be presented on behalf of the ZEUS Collaboration