

Abstract

The diffractive production of two jets in deep inelastic $e^\pm p$ scattering is measured in the kinematic region of photon virtuality $4 < Q^2 < 80 \text{ GeV}^2$, inelasticity $0.1 < y < 0.7$, momentum fraction $x_P < 0.03$, proton vertex momentum transfer $|t| < 1$ and mass of a dissociative baryonic system $M_Y < 1.6 \text{ GeV}$. Diffractive events are identified with the large rapidity gap technique. Integrated and single differential cross sections are measured for jets of transverse momenta $p_{T1}^* > 5.5 \text{ GeV}$ and $p_{T2}^* > 4.0 \text{ GeV}$ and pseudorapidities $-3 < \eta_{1,2}^* < 0$. The data were collected by the H1 experiment at the HERA collider in years 2005-2007, corresponding to an integrated luminosity of 283.7 pb^{-1} . The measurements are compared with NLO predictions based on the DGLAP parton evolution.