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Dijet production with large rapidity gap in deep-inelastic scattering at HERA

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In this measurement, the cross section for dijet production in diffractive deep-inelastic scattering is presented. The diffractive events are selected by requiring the presence of a Large Rapidity Gap in the forward region of H1 detector. The data have been collected during the HERA-2 period and correspond to an integrated luminosity of 284 pb⁻¹. The data cover the range x_P <0.03 and 4 le; Q^2 le; 80 GeV² in photon virtuality. The phase space of the analysis is defined by two inclusive jets found by the k_T cluster algorithm in the hadronic centre-of-mass system. The leading and sub-leading jets are required to have $E_T^{*jet1} > 5.5$ GeV and $E_{-}^{-}T^{*jet2}$ > 4 GeV, respectively and to lie within LAr calorimeter acceptance, i.e. $-1 < eta;^{jet1,2} < 2$. Differential cross sections are compared to QCD Next-to-leading calculations corrected to the level of stable hadrons.

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