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Diffractive dijet electroproduction at HERA

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An analysis of deep inelastic scattering interactions of the type $ep \to eXY$ in the kinematic range $Q^2 = 4 \ldots 120$ GeV^2 and $y = 0.1 \ldots 0.7$ is presented, where the component X of the hadronic final state is well separated in rapidity from a leading baryonic system with mass $M_Y < 1.6$ GeV. The squared four-momentum-transfer at the proton vertex satisfies $|t| < 1$ GeV^2 and the longitudinal momentum fraction x_X of the system X is required to be $x_X < 0.05$. Interactions are considered where the system X contains two hard jets with transverse momenta $P_t > 4$ GeV with respect to the photon-proton-axis. Data taken in 1996 with the H1 detector at HERA corresponding to an integrated luminosity of 5.2 pb^{-1} are analysed. Differential cross sections are measured and compared to models based either on a factorisable pomeron exchange with a gluon dominated structure which evolves according to the DGLAP formalism or on QCD calculations for exclusive $q\overline{q}$ and $q\overline{q}g$ jet production by the exchange of two hard gluons.