Measurement of the production of $D^{*\pm}$ mesons in deep-inelastic diffractive interactions at HERA

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A measurement is presented of $D^{*\pm}$ meson production in diffractive interactions at HERA. The cross section is measured in the kinematic range of deep inelastic scattering $2 < Q^2 < 100$ GeV^2, $0.05 < y < 0.7$ and is presented differentially as a function of the D^* meson transverse momentum and pseudo-rapidity and of observables exploring the diffractive characteristics of the process. The results are compared with a model based on a partonic pomeron as determined in a QCD analysis of the diffractive structure function, with perturbative QCD calculations of two gluon exchange and with a soft colour interaction model.