Diffractive D^* Production in DIS

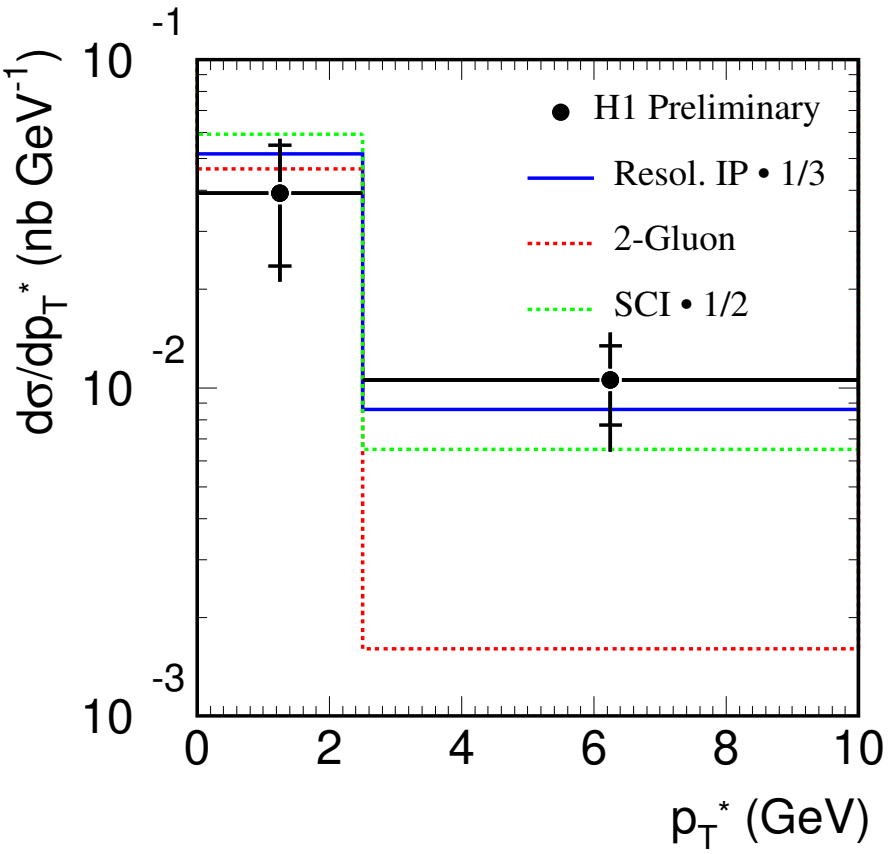

Figure 1: *Differential diffractive D^* cross sections as a function of p_T^*, where p_T^* denotes the transverse momentum of the D^* in the $\gamma^* p$ center of mass system. The cross sections are measured in the kinematic range $2 < Q^2 < 100$ GeV^2, $0.05 < y < 0.7$, $x_{I\!P} < 0.04$, $M_Y < 1.6$, $|t| < 1$GeV^2, $p_T(D^*) > 2$GeV and $|\eta(D^*)| < 1.5$. The H1 e^+p–data from 1995-1997 are shown as points with error bars (inner: statistical, outer: total). The models used for comparison are the resolved pomeron model (blue solid line), where the pomeron has a partonic structure determined in a QCD analysis of the inclusive diffractive structure function, the 2–gluon model (red dotted line) describing diffractive charm production by perturbative two gluon exchange and the soft color interaction model (green dotted line). The resolved pomeron model is normalised by a factor 1/3 and the soft color interaction model by a factor 1/2*

Diffractive D^* Production in DIS

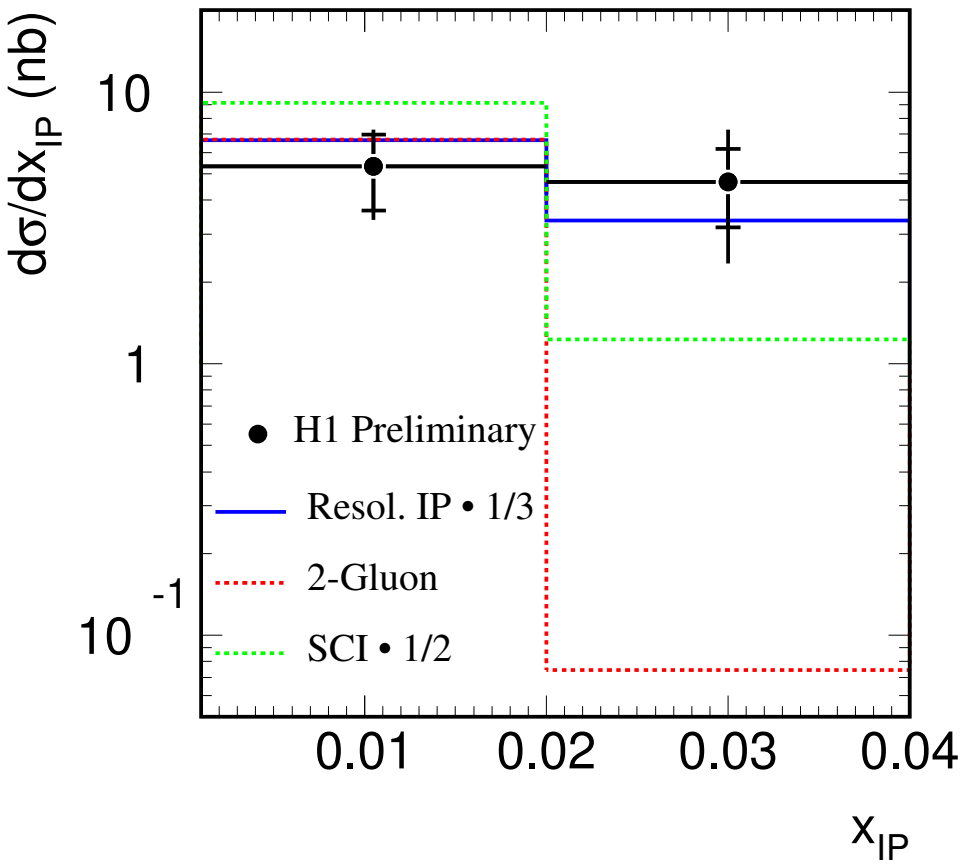

Figure 2: *Differential diffractive D^* cross section as a function of $x_{I\!P}$, where $x_{I\!P}$ is the fraction of the proton momentum carried by the pomeron. The kinematic range and the models used for comparison are described in Figure 1.*

Diffractive D^* Production in DIS

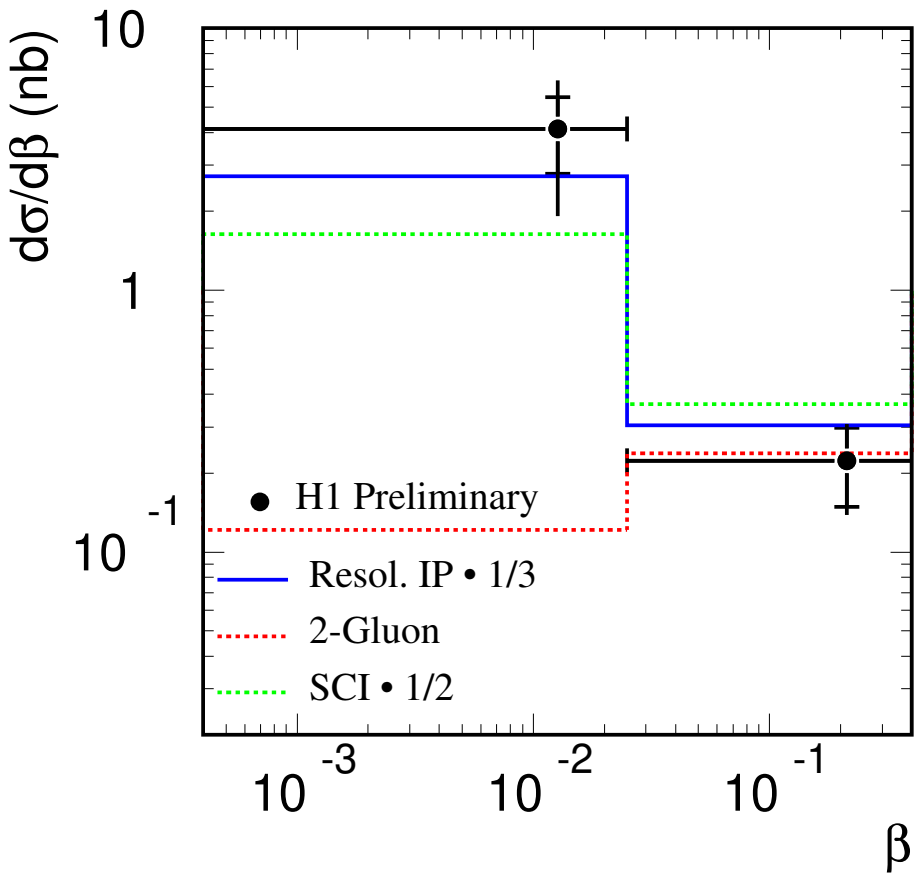

Figure 3: *Differential diffractive D^* cross section as a function of $\beta = Q^2/(M_X^2 + Q^2)$. The kinematic range and the models used for comparison are described in Figure 1.*

Diffractive D^* Production in DIS

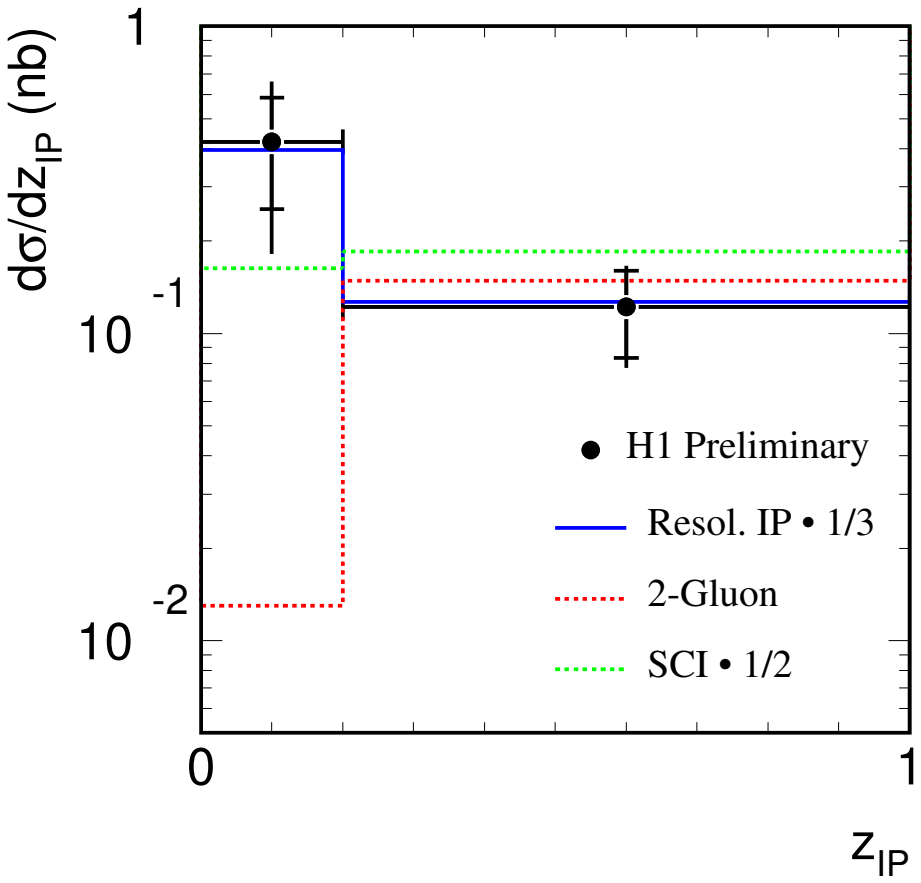

Figure 4: *Differential diffractive D^* cross section as a function of $z_{I\!P}$, where $z_{I\!P}$ is the fraction of the pomeron momentum carried by the gluon. The kinematic range and the models used for comparison are described in Figure 1.*

Diffractive D^* Production in DIS

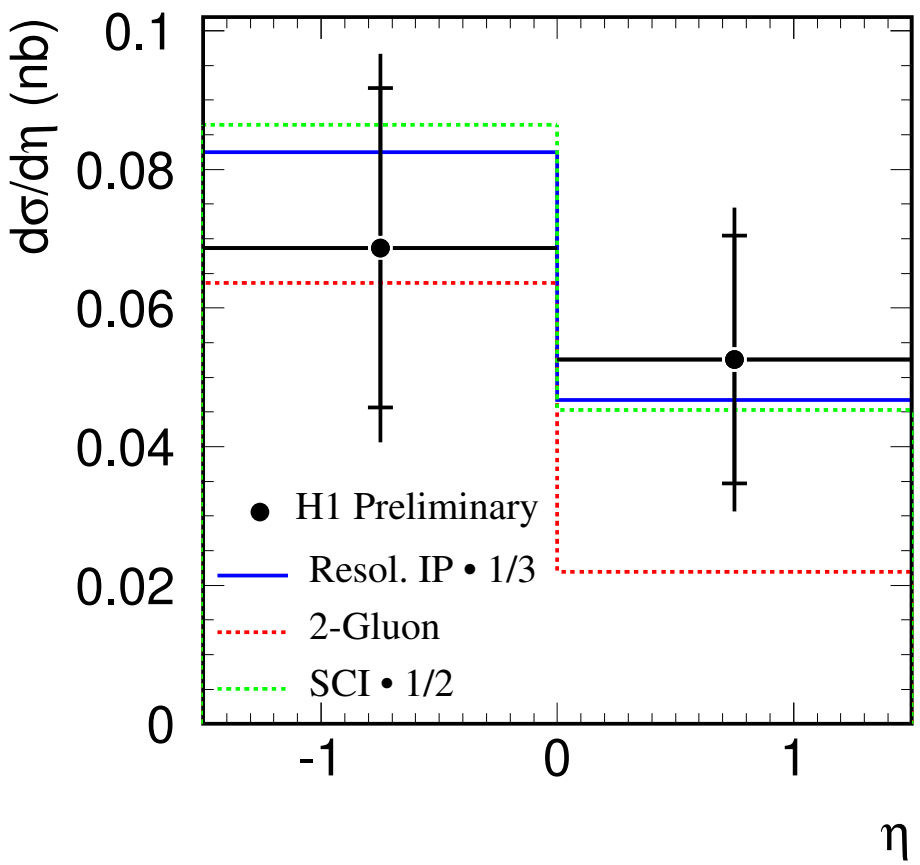

Figure 5: *Preliminary diffractive D^* cross sections as a function of η. The kinematic range and the models used for comparison are described in Figure 1.*

Diffractive D^* Production in DIS

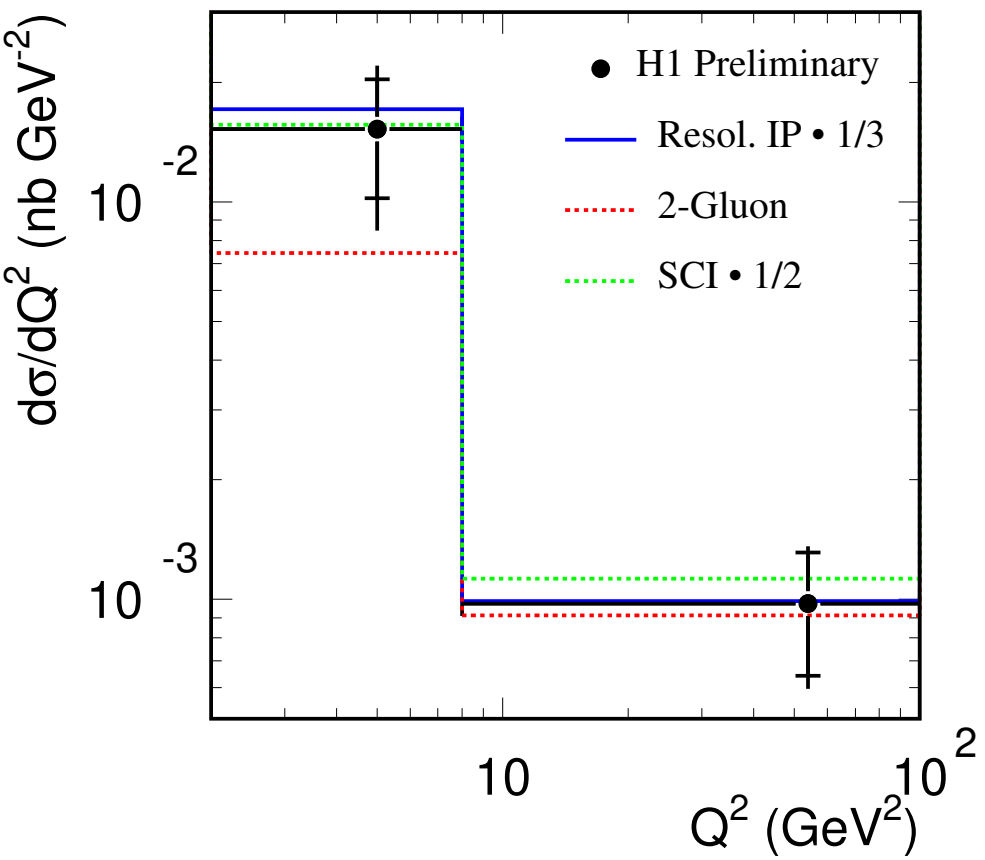

Figure 6: *Differential diffractive D^* cross sections as a function of Q^2. The kinematic range and the models used for comparison are described in Figure 1.*

Diffractive D^* Production in DIS

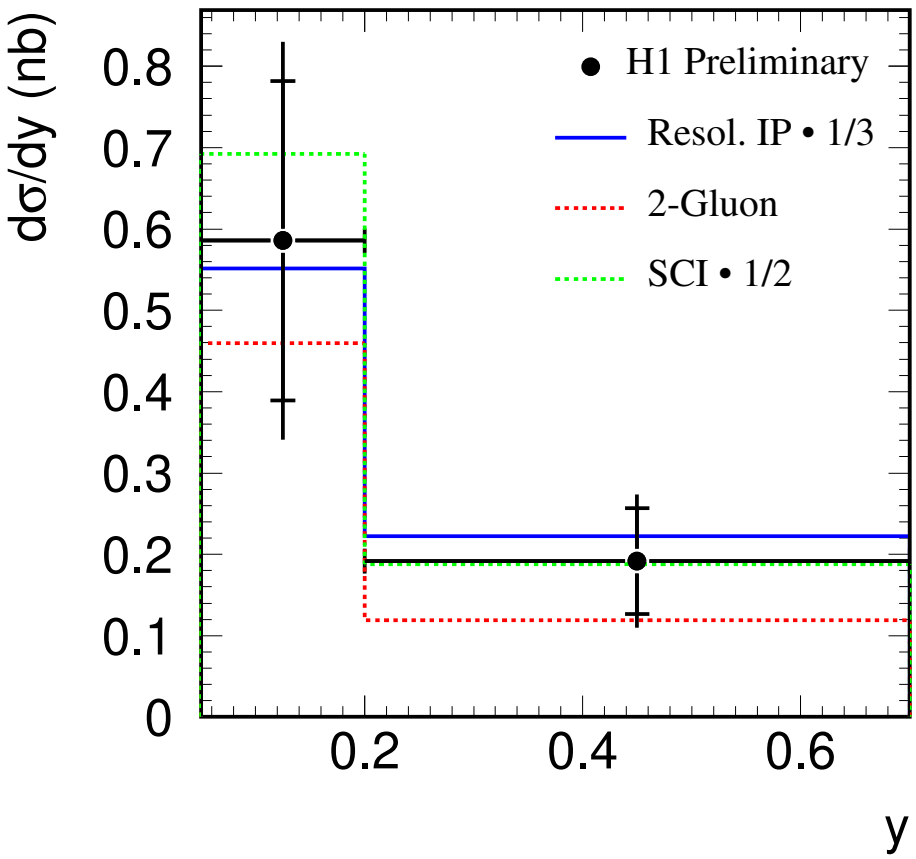

Figure 7: *Preliminary diffractive D^* cross sections as a function of y. The kinematic range and the models used for comparison are described in Figure 1.*