

Contribution submission to the conference Bonn 2010

Charm and Jets in Photoproduction — ●ZLATKA STAYKOVA —
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Photoproduction of events containing a D^* meson and two jets are investigated with the H1 detector using the HERA II data sample. The D^* mesons are reconstructed in the golden decay channel $D^* \rightarrow K\pi\pi_s$. All D^* particles are reconstructed in the central rapidity range of $|\eta(D^*)| < 1.5$ with $p_t(D^*) > 1.8 \text{ GeV}$ for the inclusive D^* sample and $p_t(D^*) > 2.1 \text{ GeV}$ for the two jet sample. The jets are reconstructed with the inclusive k_t algorithm where the D^* is treated as a leading particle. The jet associated with the D^* is limited to the same angular phase space as the D^* meson, while the second reconstructed jets covers the full rapidity acceptance of the H1 detector. The analysis profits from the trigger upgrade of the H1 trigger system resulting in about 4000 D^* mesons in the 2 jet sample.

Measured differential cross sections will be presented in different variables e.g the difference in the azimuthal angle between the jets $\Delta\varphi$, the rapidity separation between the jets $\Delta\eta$ and the invariant mass of the remnant of the event M_x . These variables are expected to reveal sensitivity to different parton dynamics approaches like DGLAP, BFKL and CCFM.

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