Proton Dissociative J/ψ Production at High |t| at HERA

H1 Collaboration

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Figure 1. The invariant mass distribution of events reconstructed in the intervals $1 > |\mathrm{t}| > 5$ GeV^2 and at $|t| > 5$ GeV^2 respectively.

Figure 2. The photon-proton differential cross-section $\mathrm{d}\sigma/\mathrm{d}|\mathrm{t}|$ for J/ψ production with proton dissociation in the kinematic range $\mathrm{Q}^2 < 1.0$ GeV^2, $50 < \mathrm{W}_{\gamma\mathrm{p}} < 160$ GeV, $|\mathrm{t}| > 1.0$ GeV^2. The line shows the prediction from a calculation in perturbative QCD (see text).

Figure 3. The photon-proton differential cross-section $\sigma(\gamma\mathrm{p} \to \mathrm{J}/\psi\mathrm{X})$ for J/ψ production with proton dissociation in the kinematic range $\mathrm{Q}^2 < 1.0$ GeV^2 for two different intervals of $|t|$. The lines show the predictions from calculations in perturbative QCD (see text).

Figure 4. The photon-proton differential cross-section $\sigma(\gamma\mathrm{p} \to \mathrm{J}/\psi\mathrm{X})$ for J/ψ production with proton dissociation in the kinematic range $\mathrm{Q}^2 < 1.0$ GeV^2 for two different intervals of $|t|$. The cross sections are fitted using a function of the form $N(W/W_0)^\delta$ where $W_0 = 90$ GeV (see text).