39. PLOTS OF CROSS SECTIONS AND RELATED QUANTITIES

Jet Production in $pp$ and $\bar{p}p$ Interactions

Figure 39.1: Transverse energy dependence of the inclusive differential jet cross sections in the central pseudorapidity region. The error bars are either statistical ($D_0$), statistical and $p_T$ dependent (UA2), statistical and energy dependent from unsmeared (UA1), uncorrelated (CDF), or total (R806) uncertainties. Comparison of the different experimental results is not straightforward, since the different experiments used different jet reconstruction algorithms. For instance, $D_0$ and CDF used a fixed cone algorithm with a size $R=0.7$ for all their measurements, compared to a cone size of 1.3 for UA2. $D_0$: Phys. Rev. D64, 032003 (2001); CDF: Phys. Rev. D64, 032001 (2001); UA1: Phys. Lett. B172, 461 (1986); UA2: Phys. Lett. B257, 232 (1991); R807: Phys. Lett. B123, 133 (1983). Next-to-Leading order QCD predictions, using CTEQ4HJ pdfs and $\mu_R, \mu_F = E_T/2$, are shown for $p\bar{p}$ at 630 GeV and 1.8 TeV. (Courtesy of V.D. Elvira, Fermilab, 2001)

Direct $\gamma$ Production in $\bar{p}p$ Interactions