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

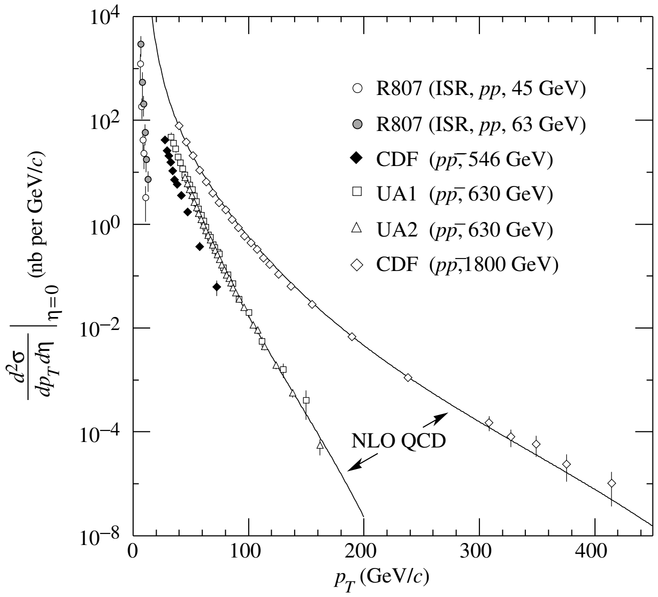

Figure 36.7: Differential cross sections for observation of a single jet of pseudorapidity $\eta = 0$ as a function of the jet transverse momentum. **CDF**—F. Abe *et al.*, Phys. Rev. Lett. **70**, 1376 (1993); **UA1**—G. Arnison *et al.*, Phys. Lett. **B172**, 461 (1986); **UA2**—J. Alitti *et al.*, Phys. Lett. **B257**, 232 (1991); **R807**—T. Akesson *et al.*, Phys. Lett. **B123**, 133 (1983). Next-to-leading order QCD curves are shown for 630 GeV and 1800 GeV. (Courtesy of S. Geer, FNAL, 1995.)

Direct γ Production in $\overline{p}p$ Interactions

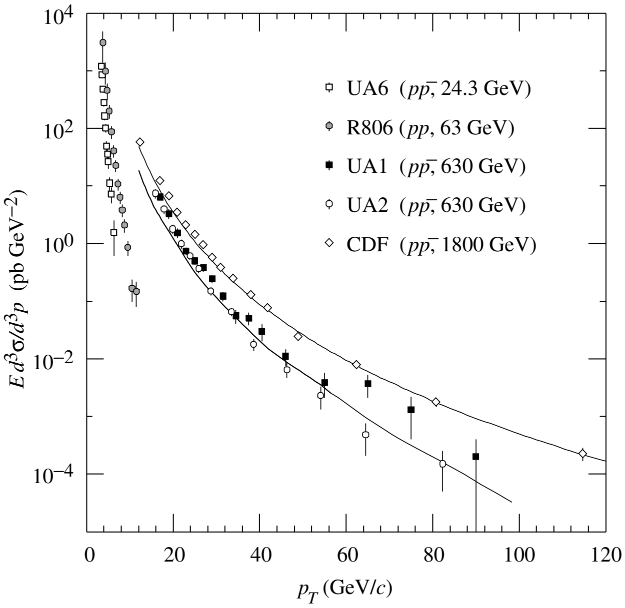

Figure 36.8: Differential cross sections for observation of a single photon of pseudorapidity $\eta = 0$ as a function of the photon transverse momentum **R806**—E. Anassontzis *et al.*, Z. Phys. **C13**, 277 (1982); **UA6**—A. Bernasconi *et al.*, Phys. Lett. **B206**, 163 (1988); **UA1**—C. Albajar *et al.*, Phys. Lett. **B209**, 385 (1988); **UA2**—J. Alitti *et al.*, Phys. Lett. **B288**, 386 (1992); **CDF**—F. Abe *et al.*, Phys. Rev. Lett. **73**, 2662 (1994). Next-to-leading order QCD curves are shown for 630 GeV and 1800 GeV. (Courtesy of S. Geer, FNAL, 1995.)

Pseudorapidity Distributions in $\overline{p}p$ Interactions

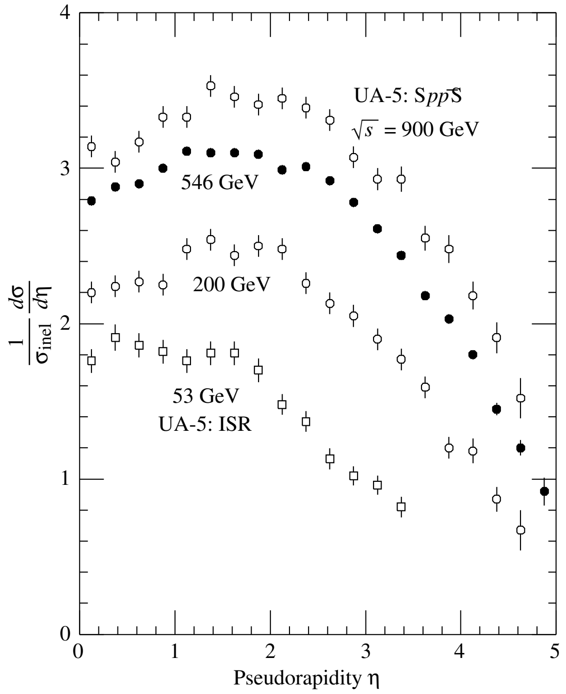

Figure 36.9: Charge particle pseudorapidity distributions in $p\overline{p}$ collisions for 53 GeV $\leq \sqrt{s} \leq$ 900 GeV. The number per pseudorapidity interval is about 10% higher if the rate is normalized excluding singly diffractive events rather than to the total inelastic rate. Sp$\overline{p}$S data are from G.J. Alner *et al.*, Z. Phys. **C33**, 1 (1986), and ISR data are from K. Alpgård *et al.*, Phys. Lett. **112B**, 193 (1982). CDF nonsingle-diffractive results at $\sqrt{s}$ = 630 and 1800 GeV are given in F. Abe *et al.*, Phys. Rev. **D41**, 2330 (1990). (Courtesy of D.R. Ward, Cambridge Univ., 1991.)