

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

Figure 38.8: 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.)



Figure 38.9: 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); DØ—S. Abachi *et al.*, Phys. Rev. Lett. 77, 5011 (1996). 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 38.10: 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.)