Prompt Photon Production at HERA (Rachid Lemrani)

Inclusive prompt photons are measured in photoproduction at HERA. Cross sections are presented as a function of transverse energy E_T^γ and pseudorapidity η^γ for $E_T^\gamma > 5$ GeV and $-1 < \eta^\gamma < 0.9$ in the γp center of mass energy range $142 < W < 266$ GeV. The data were taken with the H1 detector in the years 1996-2000. After selection of prompt photon candidates, a sizable amount of background from π^0 mesons remains and the γ signal is extracted using calorimetric shower shape variables. The results are compared to a NLO-QCD calculation and to the PYTHIA event generator.