Analysis of prompt photon production at H1 (Rachid Lemrani)

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Inclusive prompt photons in photoproduction at HERA are measured. Data are presented as a function of transverse energy E_T^γ and pseudorapidity η^γ for $E_T^\gamma > 5$ GeV and $-1 < \eta^\gamma < 1.5$ in the γp center of mass energy range 70-270 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 signal is extracted by a likelihood technique using the shower shape variables as discriminators. The results are compared to the PYTHIA Monte-Carlo and a NLO-QCD calculation.