Evolution of *ep* Fragmentation and Multiplicity Distributions in the Breit Frame

H1 Collaboration
DESY, Hamburg, Germany

Deep inelastic positron-proton scattering data, taken in 1996 and 1997 at the H1 detector at HERA, are analysed in the Breit frame of reference. Scaling violations of the fragmentation functions for charged particles are compared with a NLO QCD prediction that is modified by a power correction ansatz. The evolution of the averaged charged multiplicity, peak and width of the fragmentation function in the current hemisphere are compared for both Diffractive and non-Diffractive processes as a function of the photon virtuality, Q. Particle production is compared to e^+e^- annihilation at equivalent centre of mass energies, with MLLA calculations, and with current perturbative QCD Monte Carlo models.