36. PLOTS OF CROSS SECTIONS AND RELATED QUANTITIES

NOTE: THE FIGURES IN THIS SECTION ARE INTENDED TO SHOW THE REPRESENTATIVE DATA. THEY ARE NOT MEANT TO BE COMPLETE COMPILATIONS OF ALL THE WORLD'S RELIABLE DATA.

Structure Functions

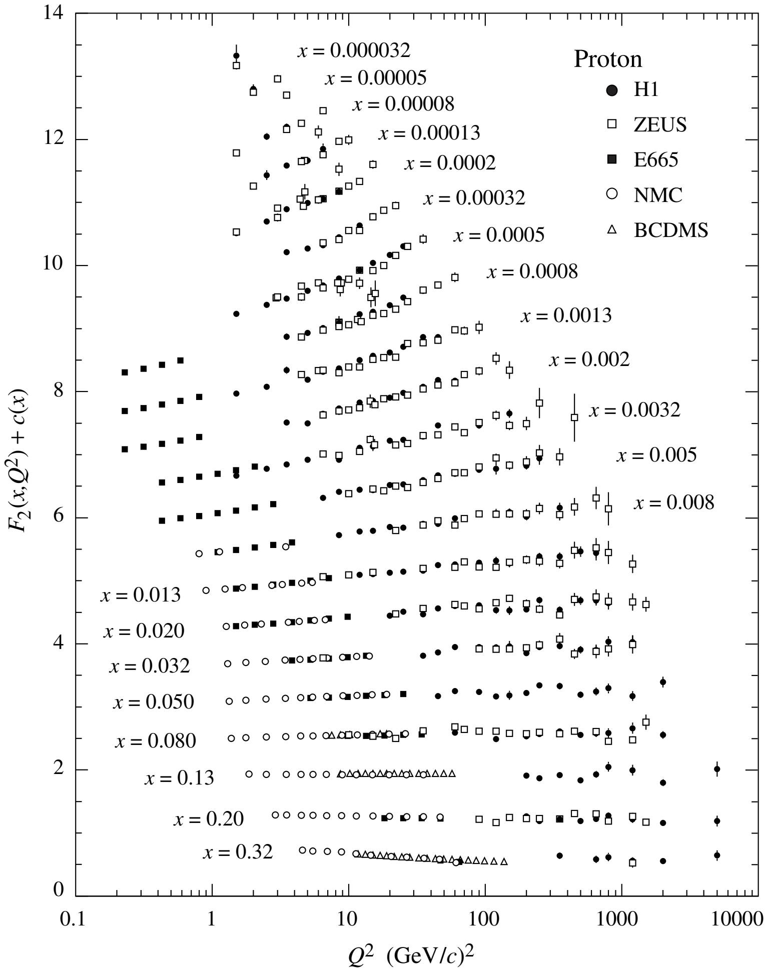

Figure 36.1: The proton structure function F_2^p measured in electromagnetic scattering of electrons (H1, ZEUS) and muons (BCDMS, E665, NMC), in the kinematic domain of the HERA data. Only statistical errors are shown. The data are plotted as a function of Q^2 in bins of fixed x. The H1 binning in x was chosen for this plot; the ZEUS, BCDMS, E665, and NMC data are rebinned to the x values of the H1 data using a phenomenological parametrization. For the purpose of plotting, a constant $c(x) = 0.6(i_x - 0.4)$ is added to F_2^p, where i_x is the number of the x bin ranging from $i_x = 1$ ($x = 0.32$) to $i_x = 21$ ($x = 0.000032$). References: **H1**—S. Aid *et al.*, DESY 96-039 (1996), subm. to Nucl. Phys. **B**; **ZEUS**—M. Derrick *et al.*, Z. Phys. **C69**, 607 (1996) and DESY 96-076 (1996), subm. to Z. Phys. **C**; **BCDMS**—A.C. Benvenuti *et al.*, Phys. Lett. **B223**, 485 (1989); **E665**—M.R. Adams *et al.*, FNAL-PUB-95/396-E, subm. to Phys. Rev. **D**; **NMC**—M. Arneodo *et al.*, Phys. Lett. **B364**, 107 (1995). (Courtesy of R. Voss, 1996.)