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

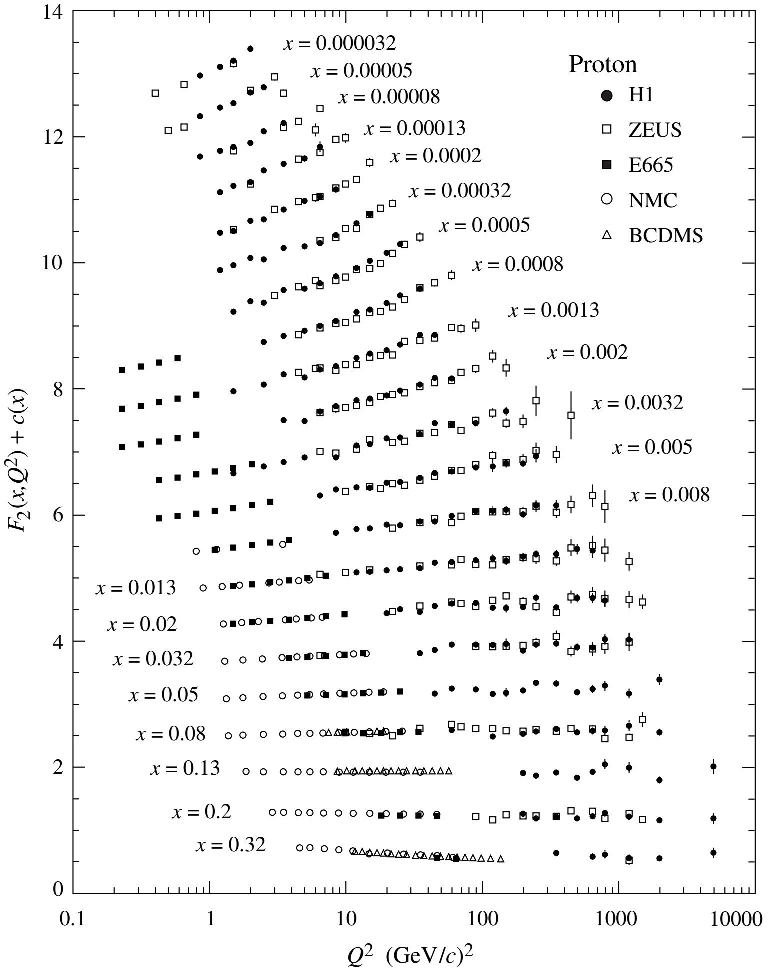

Figure 36.1: The proton structure function F_2^p measured in electromagnetic scattering of electrons (H1, ZEUS) and muons (BCDMS, E665, NMC), in the kinematic domain of the HERA data, for $x > 0.00003$; *cf.* Fig. 36.2 for data at smaller x. Only statistical errors are shown. The data are plotted as a function of Q^2 in bins of fixed x. The H1 binning in x is used in 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.*, Nucl. Phys. **B470**, 3 (1996); C. Adloff *et al.*, Nucl. Phys. **B497**, 3 (1997); **ZEUS**—M. Derrick *et al.*, Z. Phys. **C72**, 399 (1996); J. Breitweg *et al.*, Phys. Lett. **B407**, 432 (1997); **BCDMS**—A.C. Benvenuti *et al.*, Phys. Lett. **B223**, 485 (1989); **E665**—M.R. Adams *et al.*, Phys. Rev. **D54**, 3006 (1996); **NMC**—M. Arneodo *et al.*, Phys. Lett. **B364**, 107 (1995). (Courtesy of R. Voss, 1997.)