



**Figure 37.3:** The proton structure function  $F_2^p$  measured in electromagnetic scattering of electrons (SLAC) and muons (BCDMS, E665, NMC), shown as a function of  $Q^2$  for bins of fixed  $x$ . Only statistical errors are shown. For the purpose of plotting, a constant  $c(x) = 0.1i_x$  is added to  $F_2^p$  where  $i_x$  is the number of the  $x$  bin, ranging from 1 ( $x = 0.05$ ) to 14 ( $x = 0.0009$ ) on the left-hand figure, and from 1 ( $x = 0.85$ ) to 15 ( $x = 0.07$ ) on the right-hand figure. For HERA data in the kinematic range of this figure, see Fig. 37.1. References: **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). **SLAC**—L.W. Whitlow *et al.*, Phys. Lett. **B282**, 475 (1992). (Courtesy of R. Voss, 1996.)