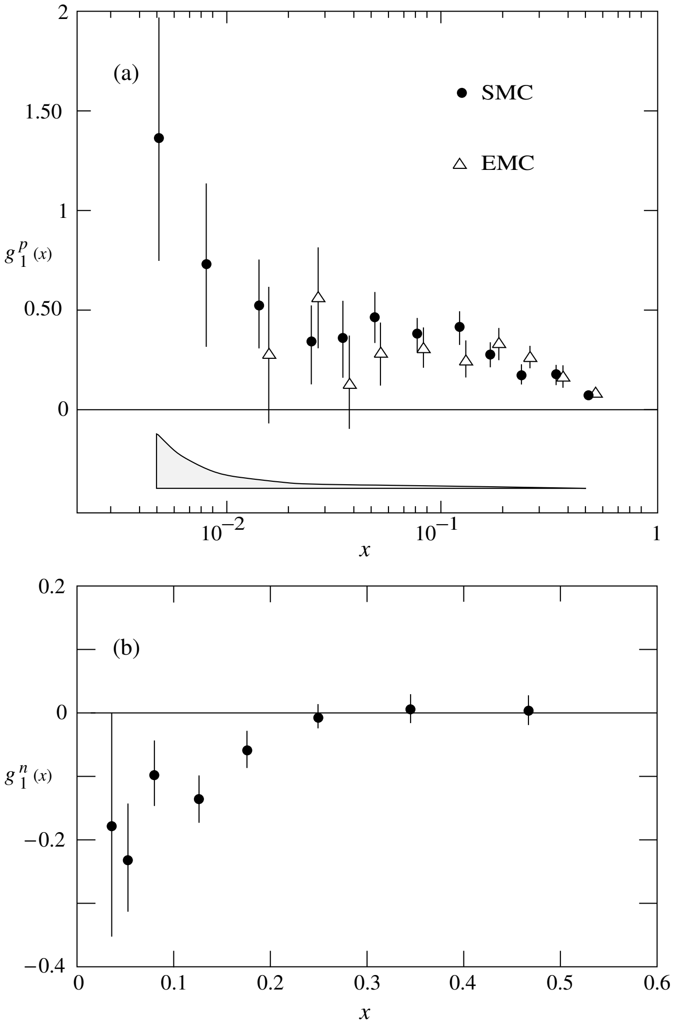
Structure Functions



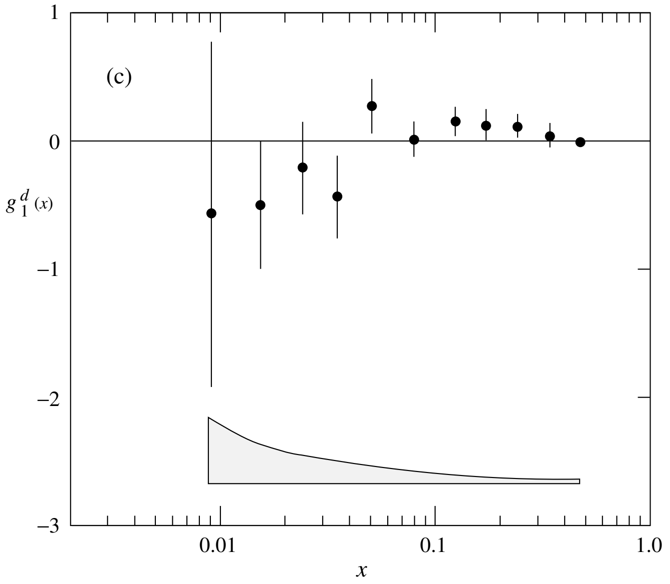


Figure 33.4: The spin-dependent structure function g_1 measured in deep inelastic scattering of polarised electrons (b) and muons (a,c) on polarised protons (a, EMC and SMC), neutrons (b, E142), and deuterons (c, SMC). For the muon data, only statistical errors are are shown with the data points and the size of the systematic errors is indicated by the shaded bands. For the electron data, statistical and systematic errors are combined in quadrature. The data are shown versus x; for each of the four experiments, the Q^2 of the data increases with increasing x. The average Q^2 is also different for each of the four experiments; all data in this plot are at 1 $\mathrm{GeV}^2 < Q^2 < 60\ \mathrm{GeV}^2$. References: **E142**—P.L. Anthony *et al.*, Phys. Rev. Lett. **71**, 959 (1993); **EMC**—J. Ashman *et al.*, Nucl. Phys. **B328**, 1 (1989); **SMC**—B. Adeva *et al.*, Phys. Lett. **B302**, 533 (1993); D. Adams *et al.*, CERN-PPE/94-57. (Courtesy of M. Virchaux and R. Voss, 1994.)