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Measurement of the charged and neutral current cross sections at HERA

H1 Collaboration,
DESY, Notkestr.85, D-22607 Hamburg, Germany

Measurements are presented of the cross sections for charged and neutral current processes with 4-momentum transfer Q^2 between 150 and 30000 GeV^2. The cross sections for e^+p scattering are compared with those for e^-p, extracted from the ongoing 1998-1999 HERA run. Evidence for the effect of Z^0 exchange in the neutral current processes is presented. The dependence of the charged current cross section on the incident quark flavour is examined. The measurements are used to extract the proton structure function $F_2(x, Q^2)$ for values of x Bjorken between 0.0032 and 0.65. Using the charged and neutral current measurements for both lepton charges the valence quark distributions of the proton are extracted at very high Q^2.