Systematic Errors

H1

Experimental errors :

- integrated luminosity
  → $\pm 2.3\%$
- electromagnetic energy scale
  → $\pm 3\%$
- hadronic energy scale
  → $\pm 4\%$

"Theoretical" errors :

- parton density distribution
  → $\pm 5\%$

  1. input data (e.g. BCDMS at high x and low Q^2)
  2. shapes of distributions (at Q_0^2 starting point of QCD evolution)

- value of α_s
  → $\pm 4\%$

  comparison CTEQ (A1) → (A5) and
  MRS (R1) → MRS (R2)

- higher order QED corrections
  → $\pm 2\%$