Systematic errors in SM predictions

ZEUS

Luminosity uncertainty	1.5%
Electroweak parameters	0.25%
Radiative corrections	2%

Evaluated with HERACLES and HECTOR : the ISR photon energy spectrum measured in the LUMI monitor agrees well with the MC simulation.

Detector simulation	6%

Uncertainty increases from about 2% for $y_{\mathrm{DA}} > 0.2$ to 4-7% for $y_{\mathrm{DA}} > 0.5$ and includes:

- variation of $\pm 3\%$ in the FCAL, BCAL energy scales
- smearing at the electron scattering angle (5 *mrad.*)
- variation in the electron finding efficiency
  - variation of HAC fraction of electron candidate
  - variation of lateral energy profiles of the electron
  - variation of non-electron energy in the cone
  - variation of track-cluster matching angles
  - variation of track momentum resolution