Systematic errors in SM predictions (cont.)

Structure Functions 6.5%

The uncertainties in the SF are studied using NLO QCD fits to fixed target F_2 measurements. The main contributions are:

Fixed-target experimental uncertainties	$\pm 6.2\%$
$0.112 < \alpha_s < 0.122$	$^{+1.9\%}_{-0.0\%}$

Cross checks on SF uncertainties include:

$10\% <$ strange fraction $< 30\%$	small
Uncertainties in charm evolution	$< 0.5\%$
GRV94, MRSA, CTEQ3 comparison	$\pm 2\%$
GRV94 NLO verses LO	$+1.0\%$
High-x gluon (CDF inspired, CTEQ4 HJ)	$+1.9\%$

Summary of systematic errors in SM predictions

Luminosity measurement	1.5%
Electroweak parameters	0.25%
Radiative corrections	2%
Detector simulation	6%
Structure Functions	6.5%
Total	9.2%