

Fit with free strange

Channel	Partial χ^2/N_{DF}
Z	4.5/8
W ⁺	16.5/11
W ⁻	10.6/11
Systematics	2.3
Total ATLAS	33.9/30

Letting the strange paramter r_s to vary improves ATLAS partial χ^2 drastically. The partial χ^2 of the HERA data does not change much. Free/fixed C_s increases/reduces uncertainty at high x , but does not change the fit quality: ATLAS data are not sensitive for $x > 0.1$.

Fit returns large value of

$$r_s = 1.00 \pm 0.20_{\text{exp}}$$

The fit does require about $+1\sigma$ change in ATLAS normalisation. Fit using DYNNLO+external corrections gives $r_s = 1.16$

