



**Total uncertainty**



**Statistical uncertainty**

$p_T^{c\text{jet}} > 30 \text{ GeV}, |\eta^{c\text{jet}}| < 2.4$

$p_T^l > 35 \text{ GeV}, |\eta^l| < 2.4$

Predictions: NLO MCFM + NLO PDF

**Data**

**0.950 ± 0.005 (stat.) ± 0.010 (syst.)**

□ CT18: 0.955<sup>+0.003</sup><sub>-0.003</sub>

△ CT18Z: 0.958<sup>+0.003</sup><sub>-0.003</sub>

◇ MMHT14: 0.935<sup>+0.021</sup><sub>-0.016</sub>

⊕ ABMP16: 0.964<sup>+0.002</sup><sub>-0.002</sub>

★ NNP3.0: 0.935<sup>+0.017</sup><sub>-0.017</sub>

☆ NNP3.1: 0.939<sup>+0.020</sup><sub>-0.020</sub>



0.4

0.6

0.8

1

$\sigma(W^+ + \bar{c}) / \sigma(W^- + c)$