

ATLAS+CMS Preliminary

September 2019

LHCtopWG

Data 2012, $\sqrt{s} = 8$ TeV, $m_t = 172.5$ GeV

: NLO (MCFM),
PDF4LHC (MSTW2008, CT10, NNPDF2.3)

■ scale uncertainty

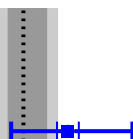
■ scale \oplus PDF \oplus α_s uncertainty

total stat

$\sigma_{t\text{-channel}} \pm (\text{stat.}) \pm (\text{syst.}) \pm (\text{lumi.})$

ATLAS, $L_{\text{int}} = 20.2 \text{ fb}^{-1}$

EPJC 77 (2017) 531



$89.6 \pm 1.2 \pm 6.8 \pm 5.9 \pm 1.7 \text{ pb}$

CMS, $L_{\text{int}} = 19.7 \text{ fb}^{-1}$

JHEP 06 (2014) 090



$83.6 \pm 2.3 \pm 7.1 \pm 2.2 \text{ pb}$

LHC combined

JHEP 05 (2019) 088



$87.7 \pm 1.1 \pm 5.5 \pm 1.5 \text{ pb}$

20 40 60 80 100 120 140 160

$\sigma_{t\text{-channel}} [\text{pb}]$