

Inclusive  $t\bar{t}$  cross section [pb]

**CMS Preliminary**

Sep 2022

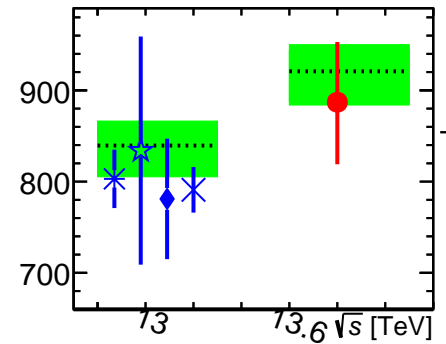
- ▽ Tevatron combined 1.96 TeV ( $L \leq 8.8 \text{ fb}^{-1}$ )
- CMS combined  $e\mu, l+jets$  5.02 TeV ( $L = 27.4\text{-}302 \text{ pb}^{-1}$ )
- CMS  $e\mu$  7 TeV ( $L = 5 \text{ fb}^{-1}$ )
- CMS  $l+jets$  7 TeV ( $L = 2.3 \text{ fb}^{-1}$ )
- ▼ CMS all-jets 7 TeV ( $L = 3.54 \text{ fb}^{-1}$ )
- CMS  $e\mu$  8 TeV ( $L = 19.7 \text{ fb}^{-1}$ )
- ▲ CMS  $l+jets$  8 TeV ( $L = 19.6 \text{ fb}^{-1}$ )
- ◇ CMS all-jets 8 TeV ( $L = 18.4 \text{ fb}^{-1}$ )
- \* CMS  $e\mu$  13 TeV ( $L = 35.9 \text{ fb}^{-1}$ )
- ☆ CMS all-jets\* 13 TeV ( $L = 2.53 \text{ fb}^{-1}$ )
- ◆ CMS  $\tau+e/\mu$  13 TeV ( $L = 35.9 \text{ fb}^{-1}$ )
- × CMS  $l+jets$  13 TeV ( $L = 137 \text{ fb}^{-1}$ )
- CMS leptons\* 13.6 TeV ( $L = 1.2 \text{ fb}^{-1}$ )

\* Preliminary

■ NNLO+NNLL (pp)  
■ NNLO+NNLL (p $\bar{p}$ )

Czakon, Fiedler, Mitov, PRL 110 (2013) 252004

NNPDF3.0,  $m_{\text{top}} = 172.5 \text{ GeV}$ ,  $\alpha_s(M_Z) = 0.118 \pm 0.001$  [ $^+ \alpha_s(M_Z) = 0.113$ ]



$10^3$

$10^2$

10

2

4

6

8

10

12

14

$\sqrt{s}$  [TeV]