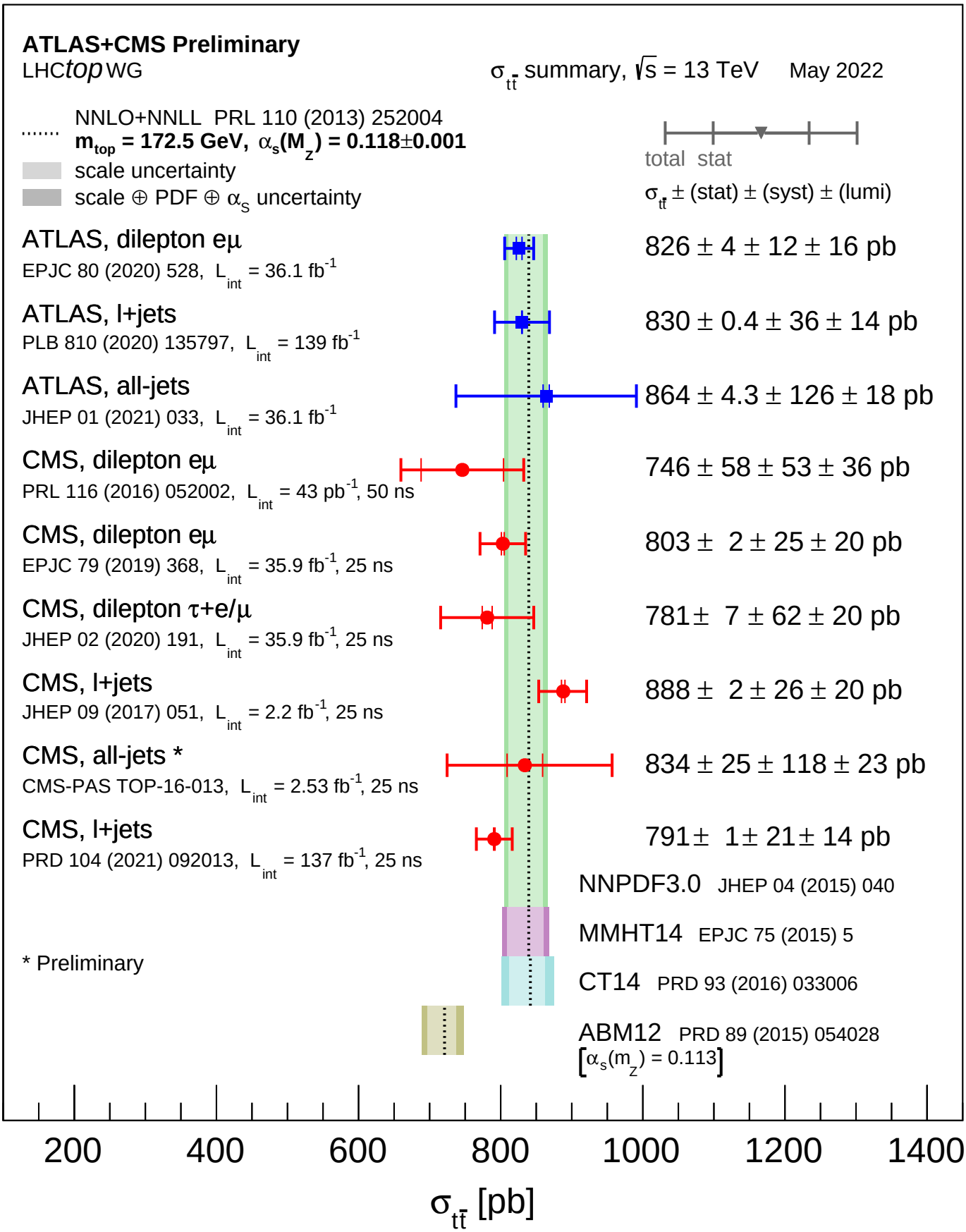
ATLAS+CMS Preliminary
LHCtop WG
σtt̄ summary, √s = 13 TeV May 2022
NNLO+NNLL PRL 110 (2013) 252004
mtop = 172.5 GeV, αs(MZ) = 0.118±0.001
scale uncertainty
scale ⊕ PDF ⊕ αS uncertainty
total stat
σtt̄ ± (stat) ± (syst) ± (lumi)
ATLAS, dilepton eμ
EPJC 80 (2020) 528, Lint = 36.1 fb-1
826 ± 4 ± 12 ± 16 pb
ATLAS, l+jets
PLB 810 (2020) 135797, Lint = 139 fb-1
830 ± 0.4 ± 36 ± 14 pb
ATLAS, all-jets
JHEP 01 (2021) 033, Lint = 36.1 fb-1
864 ± 4.3 ± 126 ± 18 pb
CMS, dilepton eμ
PRL 116 (2016) 052002, Lint = 43 pb-1, 50 ns
746 ± 58 ± 53 ± 36 pb
CMS, dilepton eμ
EPJC 79 (2019) 368, Lint = 35.9 fb-1, 25 ns
803 ± 2 ± 25 ± 20 pb
CMS, dilepton τ+e/μ
JHEP 02 (2020) 191, Lint = 35.9 fb-1, 25 ns
781 ± 7 ± 62 ± 20 pb
CMS, l+jets
JHEP 09 (2017) 051, Lint = 2.2 fb-1, 25 ns
888 ± 2 ± 26 ± 20 pb
CMS, all-jets *
CMS-PAS TOP-16-013, Lint = 2.53 fb-1, 25 ns
834 ± 25 ± 118 ± 23 pb
CMS, l+jets
PRD 104 (2021) 092013, Lint = 137 fb-1, 25 ns
791 ± 1 ± 21 ± 14 pb
NNPDF3.0 JHEP 04 (2015) 040
MMHT14 EPJC 75 (2015) 5
CT14 PRD 93 (2016) 033006
ABM12 PRD 89 (2015) 054028
[αs(mz) = 0.113]
* Preliminary
200
400
600
800
1000
1200
1400
σtt̄ [pb]