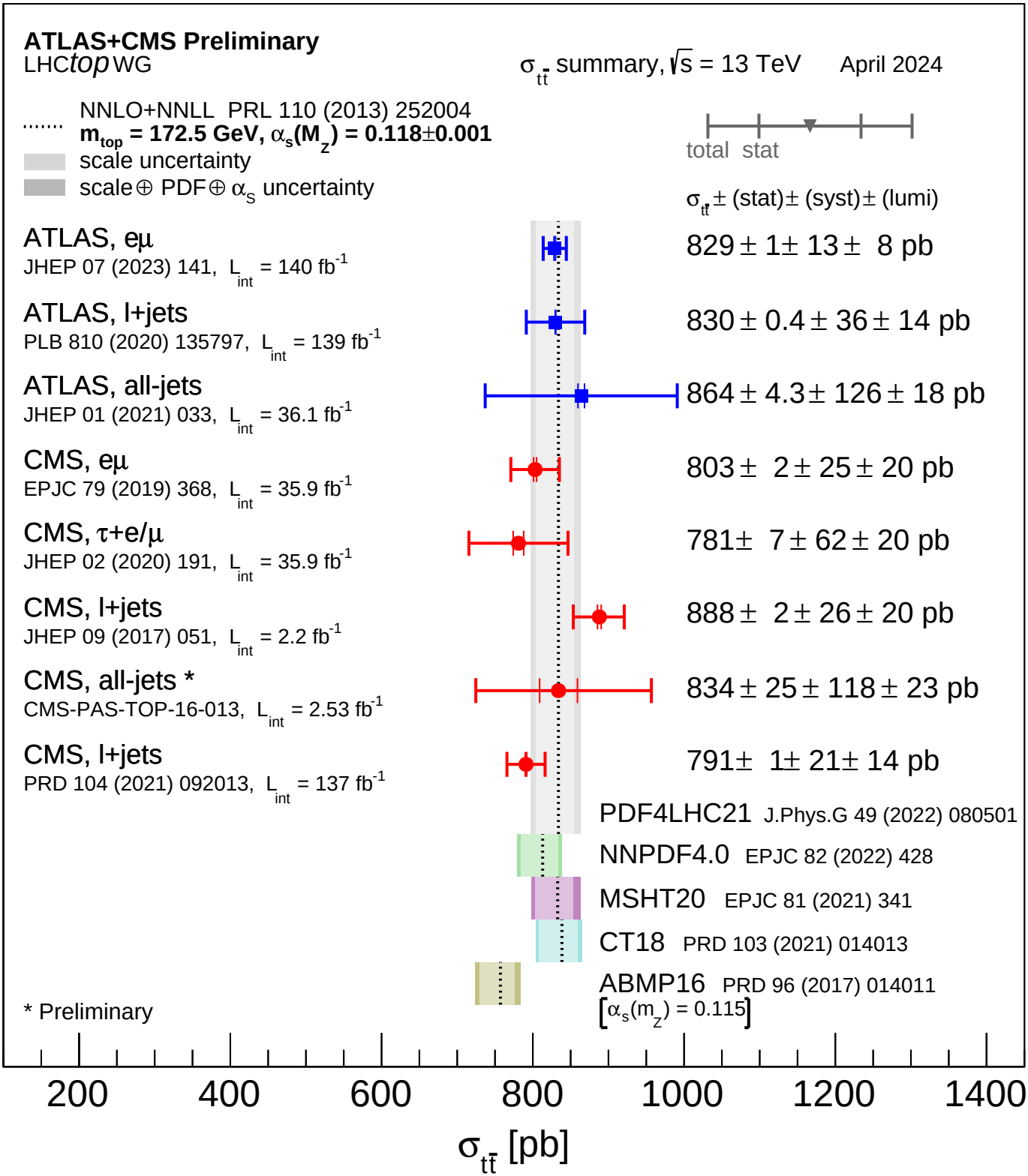
ATLAS+CMS Preliminary
LHCtop WG
σtt̄ summary, √s = 13 TeV
April 2024
NNLO+NNLL PRL 110 (2013) 252004
mtop = 172.5 GeV, αs(MZ) = 0.118±0.001
scale uncertainty
scale ⊕ PDF ⊕ αS uncertainty
total stat
σtt̄ ± (stat) ± (syst) ± (lumi)
ATLAS, eμ
JHEP 07 (2023) 141, Lint = 140 fb-1
829 ± 1 ± 13 ± 8 pb
ATLAS, 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, eμ
EPJC 79 (2019) 368, Lint = 35.9 fb-1
803 ± 2 ± 25 ± 20 pb
CMS, τ+e/μ
JHEP 02 (2020) 191, Lint = 35.9 fb-1
781 ± 7 ± 62 ± 20 pb
CMS, l+jets
JHEP 09 (2017) 051, Lint = 2.2 fb-1
888 ± 2 ± 26 ± 20 pb
CMS, all-jets *
CMS-PAS-TOP-16-013, Lint = 2.53 fb-1
834 ± 25 ± 118 ± 23 pb
CMS, l+jets
PRD 104 (2021) 092013, Lint = 137 fb-1
791 ± 1 ± 21 ± 14 pb
PDF4LHC21 J.Phys.G 49 (2022) 080501
NNPDF4.0 EPJC 82 (2022) 428
MSHT20 EPJC 81 (2021) 341
CT18 PRD 103 (2021) 014013
ABMP16 PRD 96 (2017) 014011
[αs(mZ) = 0.115]
* Preliminary
200
400
600
800
1000
1200
1400
σtt̄ [pb]