

CMS**35.9 fb⁻¹ (13 TeV)** χ^2

400

200

0

$[N_{\text{jet}}^{0,1+}, M(t\bar{t}), y(t\bar{t})]$, dof = 23, data and PDF unc.

$\alpha_s(m_Z) \pm \Delta\alpha_s(m_Z)$, CT14 [χ^2_{min}]

○ 0.1144 ± 0.0025 $m_t^{\text{pole}} = 172.5$ GeV [30]

+ 0.1197 ± 0.0022 $m_t^{\text{pole}} = 177.5$ GeV [111]

☆ 0.1050 ± 0.0029 $m_t^{\text{pole}} = 167.5$ GeV [33]

0.11

0.12

0.13

 $\alpha_s(m_Z)$ 