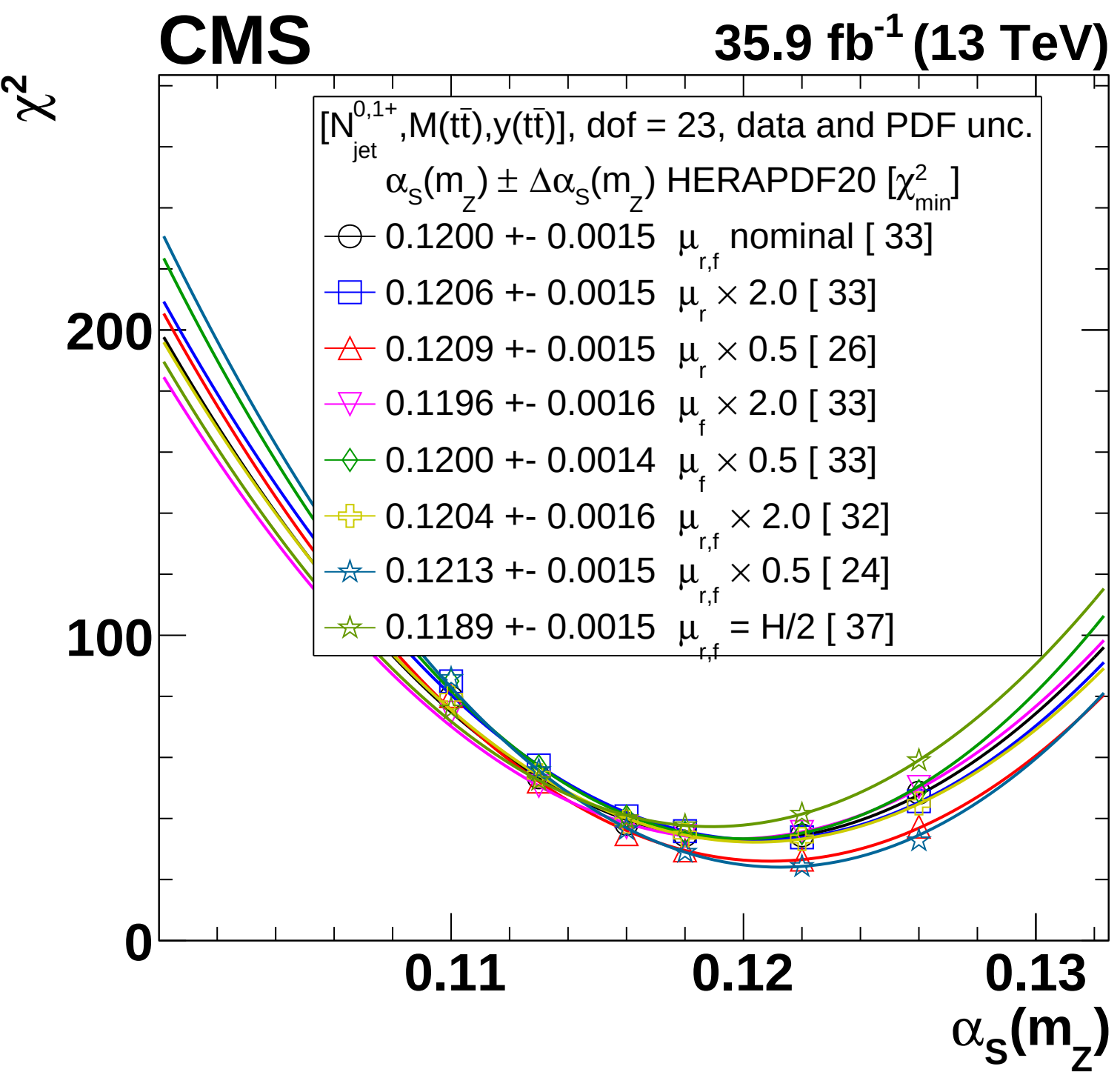
CMS
35.9 fb^{-1} (13 TeV)
χ^2
[$N_{jet}^{0,1+}$,M($t\bar{t}$),y($t\bar{t}$)], dof = 23, data and PDF unc.
$\alpha_s(m_Z) \pm \Delta\alpha_s(m_Z)$ HERAPDF20 [χ^2_{min}]
0.1200 +- 0.0015 $\mu_{r,f}$ nominal [33]
0.1206 +- 0.0015 $\mu_r \times 2.0$ [33]
0.1209 +- 0.0015 $\mu_r \times 0.5$ [26]
0.1196 +- 0.0016 $\mu_f \times 2.0$ [33]
0.1200 +- 0.0014 $\mu_f \times 0.5$ [33]
0.1204 +- 0.0016 $\mu_{r,f} \times 2.0$ [32]
0.1213 +- 0.0015 $\mu_{r,f} \times 0.5$ [24]
0.1189 +- 0.0015 $\mu_{r,f}$ = H/2 [37]
200
100
0
0.11
0.12
0.13
$\alpha_s(m_Z)$