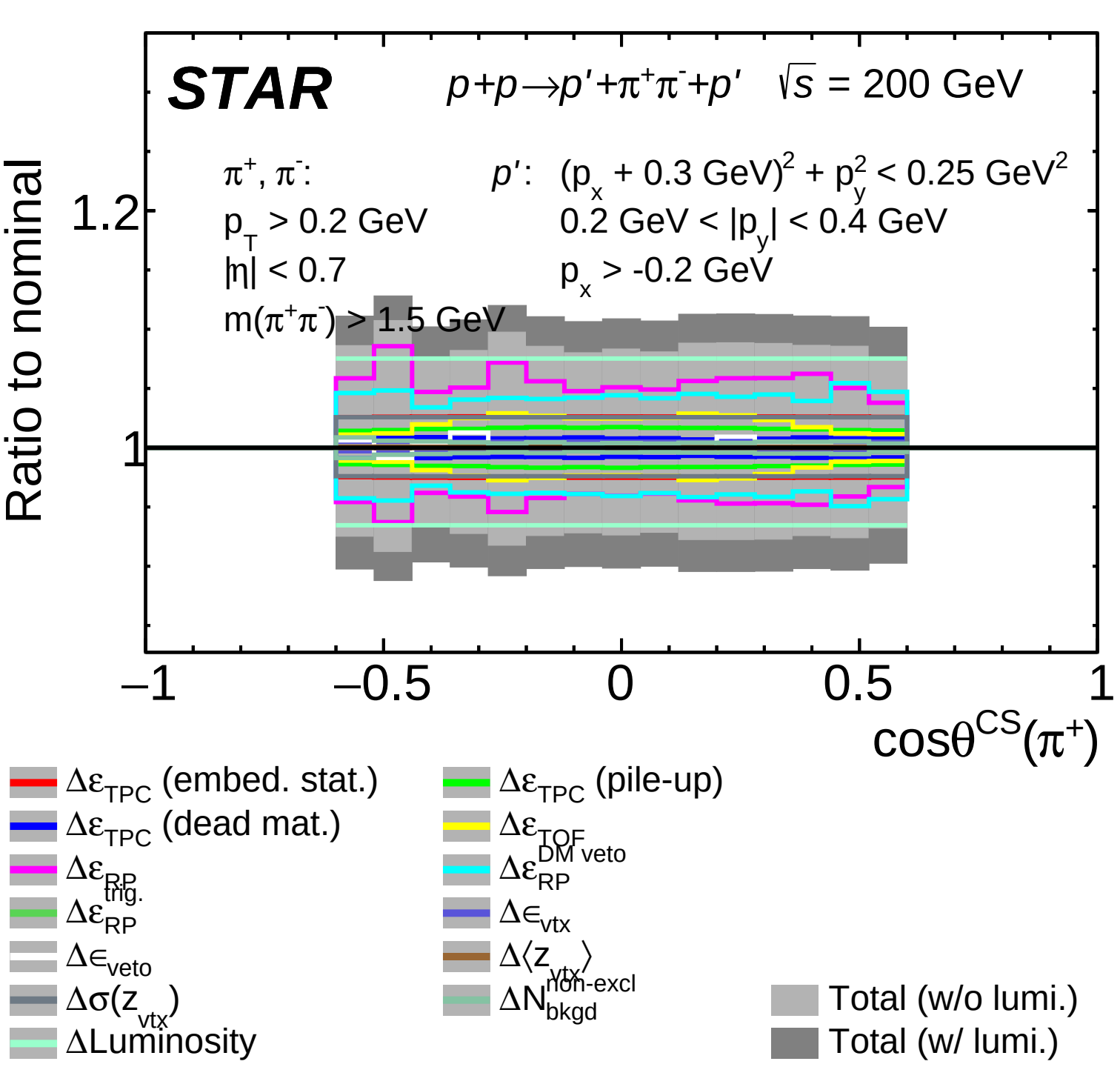
STAR
$p+p\rightarrow p'+\pi^+\pi^-+p'$ $\sqrt{s}$ = 200 GeV
$\pi^+$, $\pi^-$:
$p_T$ > 0.2 GeV
$|\eta|$ < 0.7
$m(\pi^+\pi^-)$ > 1.5 GeV
$p'$: $(p_x + 0.3\ \text{GeV})^2 + p_y^2 < 0.25\ \text{GeV}^2$
0.2 GeV < $|p_y|$ < 0.4 GeV
$p_x$ > -0.2 GeV
Ratio to nominal
1.2
1
–1
–0.5
0
0.5
1
$\cos\theta^{CS}(\pi^+)$
$\Delta\varepsilon_{TPC}$ (embed. stat.)
$\Delta\varepsilon_{TPC}$ (dead mat.)
$\Delta\varepsilon_{RP}^{trig.}$
$\Delta\varepsilon_{RP}$
$\Delta\in_{veto}$
$\Delta\sigma(z_{vtx})$
$\Delta$Luminosity
$\Delta\varepsilon_{TPC}$ (pile-up)
$\Delta\varepsilon_{TOF}$
$\Delta\varepsilon_{RP}^{DM\ veto}$
$\Delta\in_{vtx}$
$\Delta\langle z_{vtx}\rangle$
$\Delta N_{bkgd}^{non\text{-}excl}$
Total (w/o lumi.)
Total (w/ lumi.)