

Ratio to nominal

STAR

$p+p \rightarrow p' + \pi^+ \pi^- + p'$ $\sqrt{s} = 200$ GeV

$\pi^+, \pi^-:$

$p_T > 0.2$ GeV

$|\eta| < 0.7$

$p': (p_x + 0.3 \text{ GeV})^2 + p_y^2 < 0.25 \text{ GeV}^2$

$0.2 \text{ GeV} < |p_y| < 0.4 \text{ GeV}$

$p_x > -0.2 \text{ GeV}$

-1

-0.5

0

0.5

1

$\cos\theta^{\text{GJ}}(\pi^+)$

$\Delta\epsilon_{\text{TPC}}$ (embed. stat.)
 $\Delta\epsilon_{\text{TPC}}$ (dead mat.)
 $\Delta\epsilon_{\text{RP}}$
 $\Delta\epsilon_{\text{RP}}^{\text{trig.}}$
 $\Delta\epsilon_{\text{RP}}$
 $\Delta\epsilon_{\text{veto}}$
 $\Delta\sigma(z_{\text{vtx}})$
 $\Delta\text{Luminosity}$

$\Delta\epsilon_{\text{TPC}}$ (pile-up)
 $\Delta\epsilon_{\text{TOF}}$
 $\Delta\epsilon_{\text{DM veto}}$
 $\Delta\epsilon_{\text{RP}}$
 $\Delta\epsilon_{\text{vtx}}$
 $\Delta\langle z_{\text{vtx}} \rangle$
 $\Delta N_{\text{bkgd}}^{\text{non-excl}}$

Total (w/o lumi.)
 Total (w/ lumi.)