

Ratio to nominal

STAR

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

$\pi^+, \pi^-:$
 $p_T > 0.2$ GeV
 $|\eta| < 0.7$

$p':$ $(p_x + 0.3 \text{ GeV})^2 + p_y^2 < 0.25 \text{ GeV}^2$
 $0.2 \text{ GeV} < |p_y| < 0.4 \text{ GeV}$
 $p_x > -0.2 \text{ GeV}$

-180 -120 -60 0 60 120 180

$\phi^{\text{CS}}(\pi^+)$

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

$\Delta\epsilon_{\text{TPC}}$ (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.)