

STAR $p+p \rightarrow p' + \pi^+ \pi^- + p' \quad \sqrt{s} = 200 \text{ GeV}$ $\pi^+, \pi^-:$ $p_T > 0.2 \text{ GeV}$ $|\eta| < 0.7$ $1.0 \text{ GeV} < m(\pi^+ \pi^-) < 1.5 \text{ GeV}$ $p': (p_x + 0.3 \text{ GeV})^2 + p_y^2 < 0.25 \text{ GeV}^2$ $0.2 \text{ GeV} < |p_y| < 0.4 \text{ GeV}$ $p_x > -0.2 \text{ GeV}$

Ratio to nominal

1.5

1

0.1

0.15

0.2

0.25

0.3

0.35

 $|t_1 + t_2| [\text{GeV}^2]$ $\Delta \epsilon_{\text{TPC}}$ (embed. stat.) $\Delta \epsilon_{\text{TPC}}$ (dead mat.) $\Delta \epsilon_{\text{RP}}^{\text{trig.}}$ $\Delta \epsilon_{\text{RP}}$ $\Delta \epsilon_{\text{veto}}$ $\Delta \sigma(z_{\text{vtx}})$ $\Delta \epsilon_{\text{TPC}}$ (pile-up) $\Delta \epsilon_{\text{TOF}}$ $\Delta \epsilon_{\text{RP}}^{\text{DM veto}}$ $\Delta \epsilon_{\text{vtx}}$ $\Delta \langle z_{\text{vtx}} \rangle$ $\Delta \text{Luminosity}$

Total (w/ lumi.)

