

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

Ratio to nominal

1.4
1.2
1
0.8 $K^+, K^-:$ $p_T > 0.3$ GeV $|\eta| < 0.7$ $\min(p_T^+, p_T^-) < 0.7$ GeV $p': (p_x + 0.3 \text{ GeV})^2 + p_y^2 < 0.25 \text{ GeV}^2$ $0.2 \text{ GeV} < |p_y| < 0.4 \text{ GeV}$ $p_x > -0.2 \text{ GeV}$

-1

-0.5

0

0.5

1

 $\cos\theta^{\text{CS}}(K^+)$ $\Delta\epsilon_{\text{TPC}}$ (embed. stat.) $\Delta\epsilon_{\text{TPC}}$ (dead mat.) $\Delta\epsilon_{\text{RP}}$ $\Delta\epsilon_{\text{RP}}^{\text{trig.}}$ $\Delta\epsilon_{\text{veto}}$ $\Delta\sigma(z_{\text{vtx}})$ $\Delta\epsilon_{\text{TPC}}$ (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.)

