0.1 $K^{\pm}$ Track Selection

Charged kaons are identified using the AliFemtoESDTrackCutNSigmaFilter class. The specific cuts used in this analysis are as follows:

- PID Probabilities:
  - K: > 0.2
  - π: < 0.1
  - μ: < 0.8
  - p: < 0.1
- Most probable particle type must be Kaon (fMostProbable=3)
- $0.14 < p_T < 1.5$
- $|\eta| < 0.8$
- Minimum number of clusters in the TPC (fminTPCncls) = 80
- Remove particles with any kink labels (fRemoveKinks = true)
- Maximum allowed χ^2/N_{DOF} for ITS clusters = 3.0
- Maximum allowed χ^2/N_{DOF} for TPC clusters = 4.0
- Maximum allowed sigma to primary vertex (fMaxSigmaToVertex) = 3.0
- Maximum XY impact parameter = 2.4
- Maximum Z impact parameter = 3.0
- TPC and TOF N_σ cuts:
  - p < 0.4 GeV/c: $N_{\sigma K,TPC} < 2$
  - $0.4 <$ p < 0.45 GeV/c: $N_{\sigma K,TPC} < 1$
  - $0.45 <$ p < 0.8 GeV/c: $N_{\sigma K,TPC} < 3$ & $N_{\sigma K,TOF} < 2$
  - $0.8 <$ p < 1.0 GeV/c: $N_{\sigma K,TPC} < 3$ & $N_{\sigma K,TOF} < 1.5$
  - p > 1.0 GeV/c: $N_{\sigma K,TPC} < 3$ & $N_{\sigma K,TOF} < 1$
- Electron Rejection: Reject if $N_{\sigma e-,TPC} < 3$
- Pion Rejection: Reject if:
  - p < 0.65
    - if TOF and TPC available: $N_{\sigma\pi,TPC} < 3$ & $N_{\sigma\pi,TOF} < 3$
    - else
      - p < 0.5: $N_{\sigma\pi,TPC} < 3$
      - $0.5 <$ p < 0.65: $N_{\sigma\pi,TPC} < 2$
  - $0.65 <$ p < 1.5: $N_{\sigma\pi,TPC} < 5$ & $N_{\sigma\pi,TOF} < 3$
  - p > 1.5: $N_{\sigma\pi,TPC} < 5$ & $N_{\sigma\pi,TOF} < 2$