Status report

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- Fraction of prompt Xic0

- **Get fraction of prompt Xic0**
  - The efficiencies already corrected for the acceptance for both prompt and feed-down Xic0.

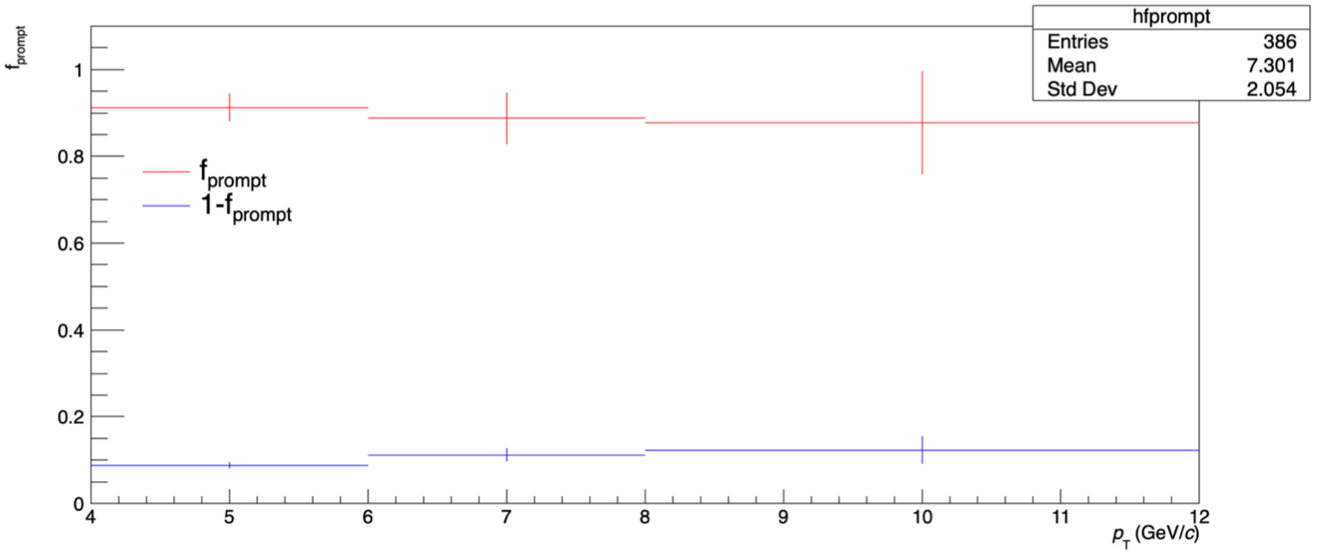
$$(\text{Acc.} \times \text{eff.})_{\text{incl.}} = f_{\text{prompt}} * (\text{Acc.} \times \text{eff.})_{\text{prompt}} + (1 - f_{\text{prompt}}) * (\text{Acc.} \times \text{eff.})_{\text{feeddown}}$$

  - In this case, f_{prompt} is calculated using as Ξ^{0}_{c} from B simulated with Pythia8 with Mode2 tune.

Nb method $f_{prompt,sel} = 1 - \frac{N_{\Xi_c^0\ from\ b}}{N_{\Xi_c^0\ raw}}$

fc method $f_{prompt,sel} = \frac{N_{\Xi_c^0\ from\ c}}{N_{\Xi_c^0\ from\ c+from\ b}}$

$$N_{\Xi_c^+\ from\ b} = \frac{\mathrm{d}\sigma^{\Xi_c^+\ \text{from b}}_{\text{PYTHIA8}}}{\mathrm{d}p_{\mathrm{T}}} \cdot 2\Delta p_{\mathrm{T}} \cdot \Delta y \cdot \mathrm{BR} \cdot L_{\mathrm{int}} \cdot (Acc \times eff)_{feeddown}$$



- Status

- **Status**
  - Running lego train (MCGen_pp, Pythia8_MB_13TeV_CR_HardQCD_Mode2)
    - https://twiki.cern.ch/twiki/bin/view/ALICE/AnalysisTrains
    - /alice/AliPhysics/PWGHF/vertexingHF/AliAnalysisTaskCharmBaryonsMC.h
    - /alice/AliPhysics/PWGHF/vertexingHF/AliAnalysisTaskCharmBaryonsMC.cxx
    - /alice/AliPhysics/PWGHF/vertexingHF/macros/AddTaskCharmBaryonsMC.C

- **Etc**
  - Physics Forum - 7/22

Back up