

UM-BNL meeting

Feb 08, 2022

Resonant substructure in the decay mode: $\Xi_c^0 \rightarrow \Lambda^0 K^- \pi^+$

Updates and plans for this week

- Last time, missed some essential cuts and made some mistakes in the reconstruction of Lambda from proton and pion from Generic MC.
- Made those changes in the steering script and ready to run the jobs.
- Toy MC was produced and fitted using the AmpTools.

Toy MC generated and fitted with AmpTools

- The amplitudes of four resonances were written:

- $\Xi(1690)^- \rightarrow \Lambda K^-$
- $\Xi(1820)^- \rightarrow \Lambda K^-$
- $\Sigma(1385)^+ \rightarrow \Lambda \pi^+$
- $K^*(890)^0 \rightarrow K^- \pi^+$

- Now our next plan is to extract the kinematics from final state particles (Generic MC) and fit those events using AmpTools.

