

Prompt $\Lambda_c^+ \rightarrow p^+ h^+ h^-$ BF Update: Offline yields



Stephen Ogilvy

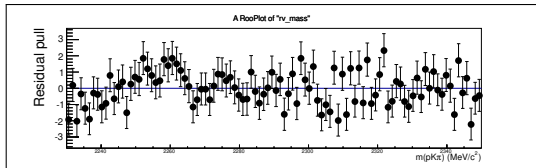
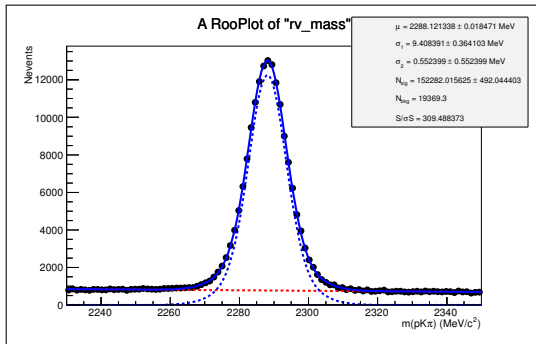


University of Glasgow

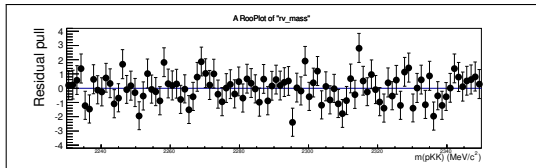
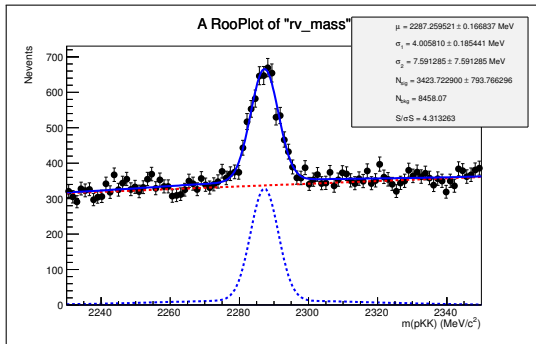
Paul Soler, Patrick Spradlin

- Have offline mass distributions for CF and SCS using DCS training (i.e. training on CF data using 0.003 global signal weight multiplier).
- Have used just the PID cuts on the DLL proton - kaon/pion. Not sure how to treat the SCS PID cuts on the Kaons and pions when we have two of them, any thoughts?
- Reminder of cuts:
 - (proton_PIDp-proton_PIDK) > 12
 - BDT_response > -0.025
 - proton_PIDp > 20
- Next will read up on how to fit the mass sidebands of the DCS mode in RooFit.

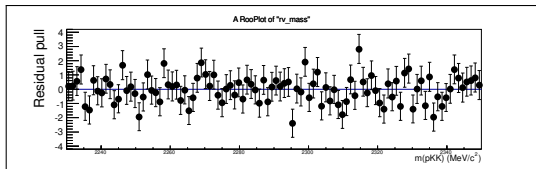
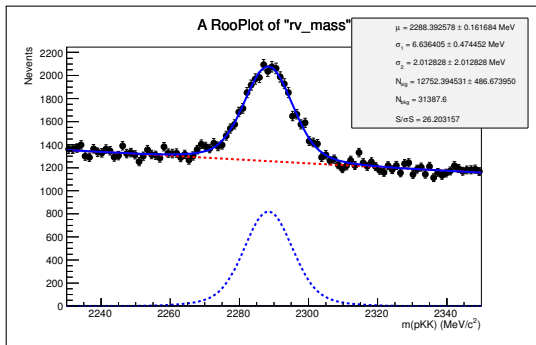
$$\Lambda_c^+ \rightarrow p^+ K^- \pi^+$$



$$\Lambda_c^+ \rightarrow p^+ K^- K^+$$



$$\Lambda_c^+ \rightarrow p^+ \pi^- \pi^+$$



$\Lambda_c^+ \rightarrow p^+ \pi^- K^+$ (DCS Sidebands)

