

BESIII Oxford Group Meeting

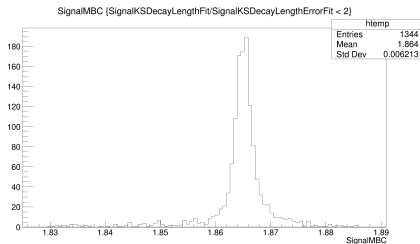
Martin Tat

Oxford LHCb

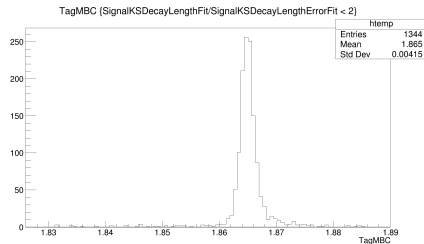
25th February 2021



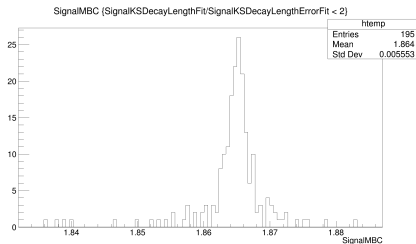
- Previously: Single tagged $D \rightarrow K^+ K^- \pi^+ \pi^-$ events
- Current progress: Double tagged $D \rightarrow K^+ K^- \pi^+ \pi^-$ events
- Tag modes:
 - $K\pi$, KK , $K_S\pi^0$, $K\pi\pi^0$
- Ran over 50% of the 2010 MC $D^0\bar{D}^0$ sample



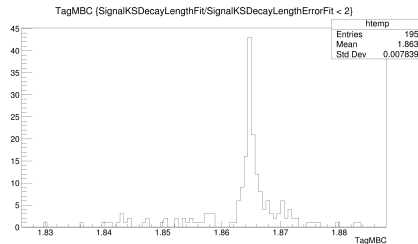
(a) $m_{BC}, KK\pi\pi$



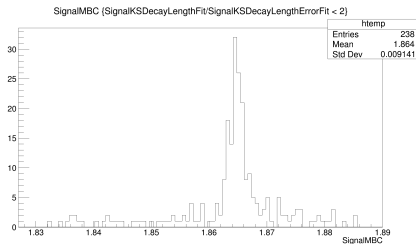
(b) $m_{BC}, K\pi$



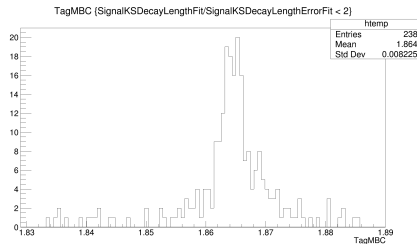
(a) $m_{BC}, KK\pi\pi$



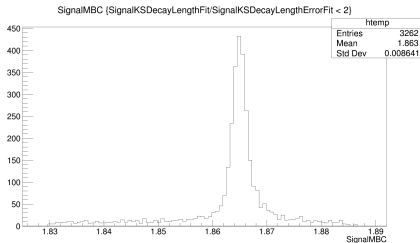
(b) m_{BC}, KK



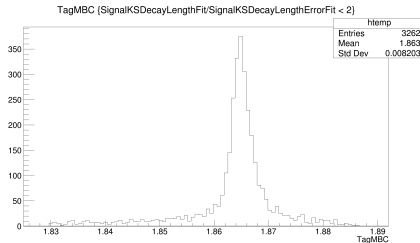
(a) $m_{BC}, KK\pi\pi$



(b) $m_{BC}, K_S\pi^0$



(a) m_{BC} , $KK\pi\pi$



(b) m_{BC} , $K\pi\pi^0$

Next steps

- Include the following modes:
 - $\pi\pi$, $\pi\pi\pi^0$, $K_S\pi^0\pi^0$, $K_S\eta$, $K_S\omega$
 - $K_L\pi^0$, $K_L\omega$, $K_L\pi^0\pi^0$
- Run over data