

# $\Omega_c^0$ lifetime measurement

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$\Omega_c^0$  lifetime measurement meeting

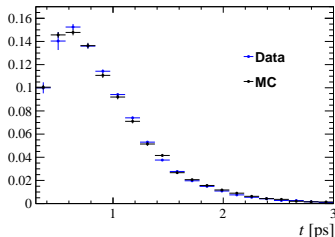
April 12, 2019



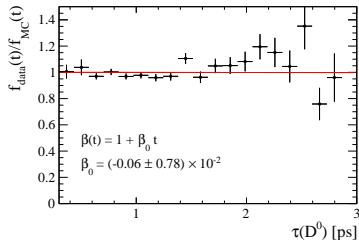
1. Measure  $\tau(D^0)$  with  $D^0 \rightarrow K^- K^+ \pi^- \pi^+$

# Decay time distribution with MC corrections

- Bug: PID weights applied upon PID cuts for L0-weighted sample



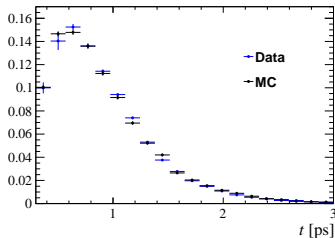
MC w/ L0, PID and Dalitz weights



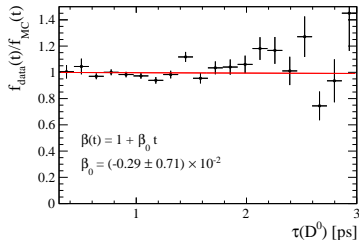
The ratio of data to MC

# Decay time distribution with MC corrections

- $\chi^2/\text{NDOF} = 41/19$

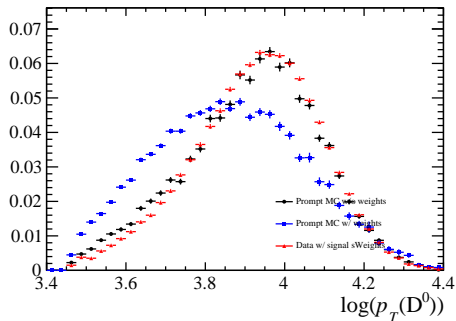


MC w/ L0, PID and Dalitz weights



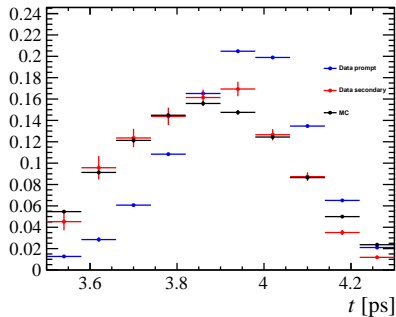
The ratio of data to MC

# $p_T(D^0)$ of data and MC



# $p_T(D^0)$ of data and MC

- Wrong  $\times$  title, should be " $\log(p_T(D^0))$ "



# Does the $p_T(D^0)$ matters?

- Yes

