Contribution ID: 113

Type: not specified

## Possibility of $T_{c\bar{s}}(2900)$ as the resonance-like structure induced by threshold effects

Wednesday, 17 August 2022 19:05 (10 minutes)

We investigate the process  $B \to \bar{D}D_s\pi$  via several rescattering processes. It is shown that the triangle singularity (TS) peak around the  $D^*K^*$  threshold generated from the  $\chi_{c1}K^*D^*$  loop is relatively narrow, which may simulate the resonance-like structure  $T_{c\bar{s}}(2900)$  recently observed by LHCb in the  $D_s\pi$  spectrum. However, the TS peak around the  $D_s^*\rho$  threshold generated from the  $D^{**}D_s^*\rho$  loop is smoothed by the broad width of  $\rho$ , which itself can hardly describe the  $T_{c\bar{s}}(2900)$  structure. A non-resonance TS signal around the DK threshold generated from the  $\chi_{c0}KD$  loop is also predicted.

## Category

poster

Primary authors: LIU, Xiao-Hai (Tianjin University); GE, Ying-Hui (Tianjin University)

Presenter: GE, Ying-Hui (Tianjin University)

Session Classification: Posters

Track Classification: Posters