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## **Heavy Mesons to Charmed Tetraquark Decays**

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Motivated by the recent observations of  $T^*_{cs0}(2870)^0$ ,  $T^*_{c\bar{s}0}(2900)^0$  and  $T^*_{c\bar{s}0}(2900)^{++}$  charmed tetraquark states by LHCb, we study the decays of heavy mesons to these charmed tetraquark states (T) using a topological amplitude approach. We first obtain the  $T \to DP$  and DS strong decay amplitudes by decomposed them into several topological amplitudes, where P is a light psedo-scalar particle and S is a low-lying scalar particle. Later on, weak decay amplitudes of  $\overline{B} \to D\overline{T}$ ,  $\overline{D}T$  and  $\overline{B} \to TP$ , TS decays are decomposed topologically. Other heavy mesons to charmed tetraquark decays are also discussed. Using these results, modes with unambiguous exotic interpretation in flavor are highlighted.

## Secondary track

T07 - Flavour Physics and CP Violation

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