$T^*_{c\bar{s}0}(2900)$

$I(J^P) = 1(0^+)$

OMITTED FROM SUMMARY TABLE

Observed by LHCb in AAIJ 23B using a simultaneous amplitude analysis of $B^0 \to \overline{D}{}^0 D_s^+ \pi^-$ and $B^+ \to D^- D_s^+ \pi^+$. The $T^*_{c\bar{s}0}(2900)^0 \to D_s^+ \pi^-$ and $T^*_{c\bar{s}0}(2900)^{++} \to D_s^+ \pi^+$ decays are observed with 8.0 and 6.5 σ significance, respectively.

$T^*_{c\bar{s}0}(2900)^0$ MASS

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
2892±14±15	[1] AAIJ	23C	LHCB	$B^0 \to \overline{D}{}^0 D_s^+ \pi^-$

[1] From an amplitude analysis of $B^0 \to \overline{D}{}^0 D_s^+ \pi^-$. A simultaneous fit to $B^0 \to \overline{D}{}^0 D_s^+ \pi^-$ and $B^- \to D^- D_s^+ \pi^+$ assuming isospin symmetry yields a mass of 2908 ± 11 ± 20 MeV.

$T^*_{c\bar{s}0}(2900)^{++}$ MASS

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
2921±17±20	[2] AAIJ	23C	LHCB	$B^- \to D^- D_s^+ \pi^+$

[2] From an amplitude analysis of $B^- \to D^- D_s^+ \pi^+$. A simultaneous fit to $B^0 \to \overline{D}{}^0 D_s^+ \pi^-$ and $B^- \to D^- D_s^+ \pi^+$ assuming isospin symmetry yields a mass of 2908 ± 11 ± 20 MeV.

$T^*_{c\bar{s}0}(2900)^0$ WIDTH

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
119±26±13	[3] AAIJ	23C	LHCB	$B^0 \to \overline{D}{}^0 D_s^+ \pi^-$

[3] From an amplitude analysis of $B^0 \to \overline{D}{}^0 D_s^+ \pi^-$. A simultaneous fit to $B^0 \to \overline{D}{}^0 D_s^+ \pi^-$ and $B^- \to D^- D_s^+ \pi^+$ assuming isospin symmetry yields a width of 136 ± 23 ± 13 MeV.

$T^*_{c\bar{s}0}(2900)^{++}$ WIDTH

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
137±32±17	[4] AAIJ	23C	LHCB	$B^- \to D^- D_s^+ \pi^+$

[4] From an amplitude analysis of $B^- \to D^- D_s^+ \pi^+$. A simultaneous fit to $B^0 \to \overline{D}{}^0 D_s^+ \pi^-$ and $B^- \to D^- D_s^+ \pi^+$ assuming isospin symmetry yields a width of 136 ± 23 ± 13 MeV.

$T^*_{c\bar{s}0}(2900)$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	$D_s^+ \pi^-$	seen
Γ_2	$D_s^+ \pi^+$	seen

$T^*_{c\bar{s}0}(2900)$ BRANCHING RATIOS

$\Gamma(D_s^+\pi^-)/\Gamma_{\text{total}}$ Γ_1/Γ

VALUE	DOCUMENT ID		TECN	COMMENT
seen	AAIJ	23C	LHCB	$B^0 \to \overline{D}^0 D_s^+ \pi^-$

$\Gamma(D_s^+\pi^+)/\Gamma_{\text{total}}$ Γ_2/Γ

VALUE	DOCUMENT ID		TECN	COMMENT
seen	AAIJ	23C	LHCB	$B^- \to D^- D_s^+ \pi^+$

$T^*_{c\bar{s}0}(2900)$ REFERENCES

AAIJ	23B	PR D108 012017	R. Aaij *et al.*	(LHCb Collab.)
AAIJ	23C	PRL 131 041902	R. Aaij *et al.*	(LHCb Collab.)