

$$T_{\bar{c}s1}^*(2900)^0$$

$$I(J^P) = ?(1^-)$$

OMITTED FROM SUMMARY TABLE
was $X_1(2900)$

An exotic state with minimal quark content $\bar{c}d\bar{s}u$. Observed by AAIJ 20AI using full amplitude analysis of $B^+ \rightarrow D^+ D^- K^+$ decays.

$T_{\bar{c}s1}^*(2900)^0$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
2887 +- 8 + 7	1.6k	¹ AAIJ	24AB LHCB	$B^+ \rightarrow D^{*+} D^- K^+$
2904 ± 5 ± 1	1.2k	² AAIJ	20AI LHCB	$B^+ \rightarrow D^+ D^- K^+$

¹ From a simultaneous amplitude analysis of $B^+ \rightarrow D^{*+} D^- K^+$, $B^+ \rightarrow D^{*-} D^+ K^+$ and their c.c.

² Obtained from the full amplitude analysis. Parameterized with the relativistic Breit-Wigner line shape. Also confirmed by the model-independent analysis of AAIJ 20AF.

$T_{\bar{c}s1}^*(2900)^0$ WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
106 ± 10 OUR AVERAGE				
92 ± 16 ± 16	1.6k	¹ AAIJ	24AB LHCB	$B^+ \rightarrow D^{*+} D^- K^+$
110 ± 11 ± 4	1.2k	² AAIJ	20AI LHCB	$B^+ \rightarrow D^+ D^- K^+$

¹ From a simultaneous amplitude analysis of $B^+ \rightarrow D^{*+} D^- K^+$, $B^+ \rightarrow D^{*-} D^+ K^+$ and their c.c.

² Obtained from the full amplitude analysis. Parameterized with the relativistic Breit-Wigner line shape. Also confirmed by the model-independent analysis of AAIJ 20AF.

$T_{\bar{c}s1}^*(2900)^0$ DECAY MODES

Mode	Fraction (Γ_j/Γ)
$\Gamma_1 \quad D^- K^+$	seen

$T_{\bar{c}s1}^*(2900)^0$ BRANCHING RATIOS

$\Gamma(D^- K^+)/\Gamma_{\text{total}}$	Γ_1/Γ		
VALUE	DOCUMENT ID	TECN	COMMENT
seen	AAIJ	20AI LHCB	$B^+ \rightarrow D^+ D^- K^+$

$T_{\bar{c}s1}^*(2900)^0$ REFERENCES

AAIJ	24AB PRL 133 131902	R. Aaij <i>et al.</i>	(LHCb Collab.)
AAIJ	20AF PRL 125 242001	R. Aaij <i>et al.</i>	(LHCb Collab.)
AAIJ	20AI PR D102 112003	R. Aaij <i>et al.</i>	(LHCb Collab.)