

$$D_{sJ}^*(2860)^\pm$$

$$I(J^P) = 0(?^?)$$

OMITTED FROM SUMMARY TABLE

Observed by AUBERT, BE 06E and AUBERT 09AR in inclusive production of DK and D^*K in e^+e^- annihilation. J^P is natural.

$D_{sJ}^*(2860)^+$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
$2862 \pm 2 \begin{smallmatrix} +5 \\ -2 \end{smallmatrix}$	3122	¹ AUBERT	09AR BABR	$e^+e^- \rightarrow D^{(*)}KX$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
$2856.6 \pm 1.5 \pm 5.0$		² AUBERT, BE	06E BABR	$e^+e^- \rightarrow DKX$
¹ From simultaneous fits to the two DK mass spectra and to the total D^*K mass spectrum.				
² Superseded by AUBERT 09AR.				

$D_{sJ}^*(2860)^+$ WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
$48 \pm 3 \pm 6$	3122	³ AUBERT	09AR BABR	$e^+e^- \rightarrow D^{(*)}KX$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
$47 \pm 7 \pm 10$		⁴ AUBERT, BE	06E BABR	$e^+e^- \rightarrow DKX$
³ From simultaneous fits to the two DK mass spectra and to the total D^*K mass spectrum.				
⁴ Superseded by AUBERT 09AR.				

$D_{sJ}^*(2860)^\pm$ DECAY MODES

Mode
Γ_1 DK
Γ_2 D^0K^+
Γ_3 $D^+K_S^0$
Γ_4 D^*K
Γ_5 $D^{*0}K^+$
Γ_6 $D^{*+}K_S^0$

$D_{sJ}^*(2860)^\pm$ BRANCHING RATIOS

$\Gamma(D^*K)/\Gamma(DK)$				Γ_4/Γ_1
VALUE	EVTS	DOCUMENT ID	TECN	COMMENT
$1.10 \pm 0.15 \pm 0.19$	3122	⁵ AUBERT	09AR BABR	$e^+e^- \rightarrow D^{(*)}KX$
⁵ From the average of the corresponding ratios with $D^{(*)0}K^+$ and $D^{(*)+}K_S^0$.				

$\Gamma(D^{*0}K^+)/\Gamma(D^0K^+)$ Γ_5/Γ_2

VALUE EVTS DOCUMENT ID TECN COMMENT

• • • We do not use the following data for averages, fits, limits, etc. • • •

1.04±0.17±0.20 2241 ⁶ AUBERT 09AR BABR $e^+e^- \rightarrow D^{(*)}KX$

⁶ From the $D^{*0}K^+$ and D^0K^+ , where $D^{*0} \rightarrow D^0\pi^0$.

$\Gamma(D^{*+}K_S^0)/\Gamma(D^+K_S^0)$ Γ_6/Γ_3

VALUE EVTS DOCUMENT ID TECN COMMENT

• • • We do not use the following data for averages, fits, limits, etc. • • •

1.38±0.35±0.49 881 ⁷ AUBERT 09AR BABR $e^+e^- \rightarrow D^{(*)}KX$

⁷ From the $D^{*+}K_S^0$ and $D^+K_S^0$, where $D^{*+} \rightarrow D^+\pi^0$.

$D_{sJ}^*(2860)^\pm$ REFERENCES

AUBERT	09AR PR D80 092003	B. Aubert <i>et al.</i>	(BABAR Collb.)
AUBERT,BE	06E PRL 97 222001	B. Aubert <i>et al.</i>	(BABAR Collab.)