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

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

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
$2863.2^{+4.0}_{-2.6}$ OUR AVERAGE				
$2866.1 \pm 1.0 \pm 6.3$	36k	[1] AAIJ	12AU LHCB	$pp \to (DK)^+X$ at 7 TeV
$2862 \pm 2 \ ^{+5}_{-2}$	3122	[2] AUBERT	09AR BABR	$e^+e^- \to D^{(*)}KX$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
$2856.6 \pm 1.5 \pm 5.0$		[3] AUBERT,BE	06E BABR	$e^+e^- \to DKX$

[1] From the combined fit of the $D^+K_S^0$ and D^0K^+ modes in the model including the $D_{s2}^*(2573)^+$, $D_{s1}^*(2700)^+$ and spin-0 $D_{sJ}^*(2860)^+$.

[2] From simultaneous fits to the two DK mass spectra and to the total D^*K mass spectrum.

[3] Superseded by AUBERT 09AR.

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

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
58 ±11 OUR AVERAGE	Error includes scale factor of 2.2.			
$69.9 \pm 3.2 \pm 6.6$	36k	[4] AAIJ	12AU LHCB	$pp \to (DK)^+X$ at 7 TeV
$48 \pm 3 \pm 6$	3122	[5] AUBERT	09AR BABR	$e^+e^- \to D^{(*)}KX$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
$47 \pm 7 \pm 10$		[6] AUBERT,BE	06E BABR	$e^+e^- \to DKX$

[4] From the combined fit of the $D^+K_S^0$ and D^0K^+ modes in the model including the $D_{s2}^*(2573)^+$, $D_{s1}^*(2700)^+$ and spin-0 $D_{sJ}^*(2860)^+$.

[5] From simultaneous fits to the two DK mass spectra and to the total D^*K mass spectrum.

[6] Superseded by AUBERT 09AR.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±0.15±0.19	3122	[7] AUBERT	09AR	BABR	$e^+e^- \to D^{(*)}KX$

[7] 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	[8] AUBERT	09AR	BABR	$e^+e^- \to D^{(*)}KX$

[8] From the $D^{*0}K^+$ and D^0K^+, where $D^{*0} \to D^0\pi^0$.

$\Gamma(D^{*+}K_S^0)/\Gamma(D^+K_S^0)$ 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	[9] AUBERT	09AR	BABR	$e^+e^- \to D^{(*)}KX$

[9] From the $D^{*+}K_S^0$ and $D^+K_S^0$, where $D^{*+} \to D^+\pi^0$.

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

AAIJ	12AU	JHEP 1210 151	R. Aaij *et al.*	(LHCb Collab.)
AUBERT	09AR	PR D80 092003	B. Aubert *et al.*	(BABAR Collb.)
AUBERT,BE	06E	PRL 97 222001	B. Aubert *et al.*	(BABAR Collab.)