$D^*_{s1}(2860)^\pm$

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

OMITTED FROM SUMMARY TABLE

J^P consitent with 1^- from angular analysis of AAIJ 14AW. Observed by AUBERT,BE 06E and AUBERT 09AR in inclusive production of DK and D^*K in e^+e^- annihilation.

$D^*_{s1}(2860)^+$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	COMMENT
2859 ±12 ±24		[1] AAIJ	14AW	LHCB	$B^0_s \to \overline{D}^0 K^- \pi^+$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
2866.1± 1.0± 6.3	36k	[2,3] AAIJ	12AU	LHCB	$pp \to (DK)^+X$ at 7 TeV
2862 ± 2 $^{+5}_{-2}$	3122	[3,4] AUBERT	09AR	BABR	$e^+e^- \to D^{(*)}KX$
2856.6± 1.5± 5.0		[5] AUBERT,BE	06E	BABR	$e^+e^- \to DKX$

[1] Separated from the spin-3 component $D^*_{s3}(2860)^-$ by a fit of the helicity angle of the $\overline{D}^0 K^-$ system, with a statistical significance of the spin-3 and spin-1 components in excess of 10 σ.

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

[3] Possible contribution from the $D^*_{s3}(2860)$ state.

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

[5] Superseded by AUBERT 09AR.

$D^*_{s1}(2860)^+$ WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	COMMENT
159 ±23 ±77		[1] AAIJ	14AW	LHCB	$B^0_s \to \overline{D}^0 K^- \pi^+$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
69.9± 3.2± 6.6	36k	[2,3] AAIJ	12AU	LHCB	$pp \to (DK)^+X$ at 7 TeV
48 ± 3 ± 6	3122	[3,4] AUBERT	09AR	BABR	$e^+e^- \to D^{(*)}KX$
47 ± 7 ±10		[5] AUBERT,BE	06E	BABR	$e^+e^- \to DKX$

[1] Separated from the spin-3 component $D^*_{s3}(2860)^-$ by a fit of the helicity angle of the $\overline{D}^0 K^-$ system, with a statistical significance of the spin-3 and spin-1 components in excess of 10 σ.

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

[3] Possible contribution from the $D^*_{s3}(2860)$ state.

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

[5] Superseded by AUBERT 09AR.

$D_{s1}^{*}(2860)^{\pm}$ DECAY MODES

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

$D_{s1}^{*}(2860)^{\pm}$ BRANCHING RATIOS

$\Gamma(D^* K)/\Gamma(DK)$ Γ_4/Γ_1

VALUE	EVTS	DOCUMENT ID		TECN	COMMENT
1.10±0.15±0.19	3122	[1] AUBERT	09AR	BABR	$e^+e^- \to D^{(*)}KX$

[1] 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	[1] AUBERT	09AR	BABR	$e^+e^- \to D^{(*)}KX$

[1] 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	[1] AUBERT	09AR	BABR	$e^+e^- \to D^{(*)}KX$

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

$D_{s1}^{*}(2860)^{\pm}$ REFERENCES

AAIJ	14AW	PRL 113 162001	R. Aaij *et al.*	(LHCb Collab.) JP
AAIJ	12AU	JHEP 1210 151	R. Aaij *et al.*	(LHCb Collab.)
AUBERT	09AR	PR D80 092003	B. Aubert *et al.*	(BABAR Collab.)
AUBERT,BE	06E	PRL 97 222001	B. Aubert *et al.*	(BABAR Collab.)