

$D_{s1}^*(2700)^{\pm}$

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

OMITTED FROM SUMMARY TABLE

$D_{s1}^*(2700)^+ \text{ MASS}$

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
2709⁺⁹₋₆ OUR AVERAGE				
2710 ± 2 ⁺¹² ₇	10.4k	¹ AUBERT	09AR BABR	$e^+ e^- \rightarrow D^{(*)} K X$
2708 ± 9 ⁺¹¹ ₁₀	182	BRODZICKA 08	BELL	$B^+ \rightarrow D^0 \bar{D}^0 K^+$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
2688 ± 4 ± 3		² AUBERT,BE	06E BABR	10.6 $e^+ e^- \rightarrow D K X$
¹ From simultaneous fits to the two $D K$ mass spectra and to the total $D^* K$ mass spectrum.				
² Superseded by AUBERT 09AR.				

$D_{s1}^*(2700)^+ \text{ WIDTH}$

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
125± 30 OUR AVERAGE				
149 ± 7 ⁺³⁹ ₅₂	10.4k	³ AUBERT	09AR BABR	$e^+ e^- \rightarrow D^{(*)} K X$
108 ± 23 ⁺³⁶ ₃₁	182	BRODZICKA 08	BELL	$B^+ \rightarrow D^0 \bar{D}^0 K^+$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
112 ± 7 ± 36		⁴ AUBERT,BE	06E BABR	10.6 $e^+ e^- \rightarrow D K X$
³ From simultaneous fits to the two $D K$ mass spectra and to the total $D^* K$ mass spectrum.				
⁴ Superseded by AUBERT 09AR.				

$D_{s1}^*(2700)^{\pm} \text{ DECAY MODES}$

Mode
$\Gamma_1 D K$
$\Gamma_2 D^0 K^+$
$\Gamma_3 D^+ K_S^0$
$\Gamma_4 D^* K$
$\Gamma_5 D^{*0} K^+$
$\Gamma_6 D^{*+} K_S^0$

$D_{s1}^*(2700)^{\pm}$ BRANCHING RATIOS

$\Gamma(D^*K)/\Gamma(DK)$

VALUE	EVTS	DOCUMENT ID	TECN	COMMENT	Γ_4/Γ_1
0.91±0.13±0.12	10.4k	⁵ AUBERT	09AR BABR	$e^+e^- \rightarrow D^{(*)}KX$	

⁵ From the average of the corresponding ratios with $D^{(*)}0K^+$ and $D^{(*)}+K_S^0$.

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

VALUE	EVTS	DOCUMENT ID	TECN	COMMENT	Γ_5/Γ_2
• • • We do not use the following data for averages, fits, limits, etc. • • •					

0.88±0.14±0.14 7716 ⁶ AUBERT 09AR BABR $e^+e^- \rightarrow D^{(*)}KX$

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

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

VALUE	EVTS	DOCUMENT ID	TECN	COMMENT	Γ_6/Γ_3
• • • We do not use the following data for averages, fits, limits, etc. • • •					

1.14±0.39±0.23 2700 ⁷ AUBERT 09AR BABR $e^+e^- \rightarrow D^{(*)}KX$

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

$D_{s1}^*(2700)^{\pm}$ REFERENCES

AUBERT	09AR PR D80 092003	B. Aubert <i>et al.</i>	(BABAR Collab.)
BRODZICKA	08 PRL 100 092001	J. Brodzicka <i>et al.</i>	(BELLE Collab.)
AUBERT,BE	06E PRL 97 222001	B. Aubert <i>et al.</i>	(BABAR Collab.)