

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

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

OMITTED FROM SUMMARY TABLE

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

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| ² Superseded by AUBERT 09AR.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

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

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| ⁴ Superseded by AUBERT 09AR.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

 $D_{s1}^*(2700)^\pm$ 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 $D^{*+}K_S^0$ |

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

$\Gamma(D^* K)/\Gamma(D K)$ Γ_4/Γ_1

| VALUE | EVTS | DOCUMENT ID | TECN | COMMENT |
|--|-------|---------------------|-----------|-----------------------------------|
| $0.91 \pm 0.13 \pm 0.12$ | 10.4k | ⁵ AUBERT | 09AR BABR | $e^+ e^- \rightarrow D^{(*)} K X$ |

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

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

| VALUE | EVTS | DOCUMENT ID | TECN | COMMENT |
|-------|------|-------------|------|---------|
|-------|------|-------------|------|---------|

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

| | | | | |
|--------------------------|------|---------------------|-----------|-----------------------------------|
| $0.88 \pm 0.14 \pm 0.14$ | 7716 | ⁶ AUBERT | 09AR BABR | $e^+ e^- \rightarrow D^{(*)} K X$ |
|--------------------------|------|---------------------|-----------|-----------------------------------|

⁶ From the $D^{*0} K^+$ and $D^0 K^+$, 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. • • •

| | | | | |
|--------------------------|------|---------------------|-----------|-----------------------------------|
| $1.14 \pm 0.39 \pm 0.23$ | 2700 | ⁷ AUBERT | 09AR BABR | $e^+ e^- \rightarrow D^{(*)} K X$ |
|--------------------------|------|---------------------|-----------|-----------------------------------|

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.) |