

$D_2^*(2460)^\pm$

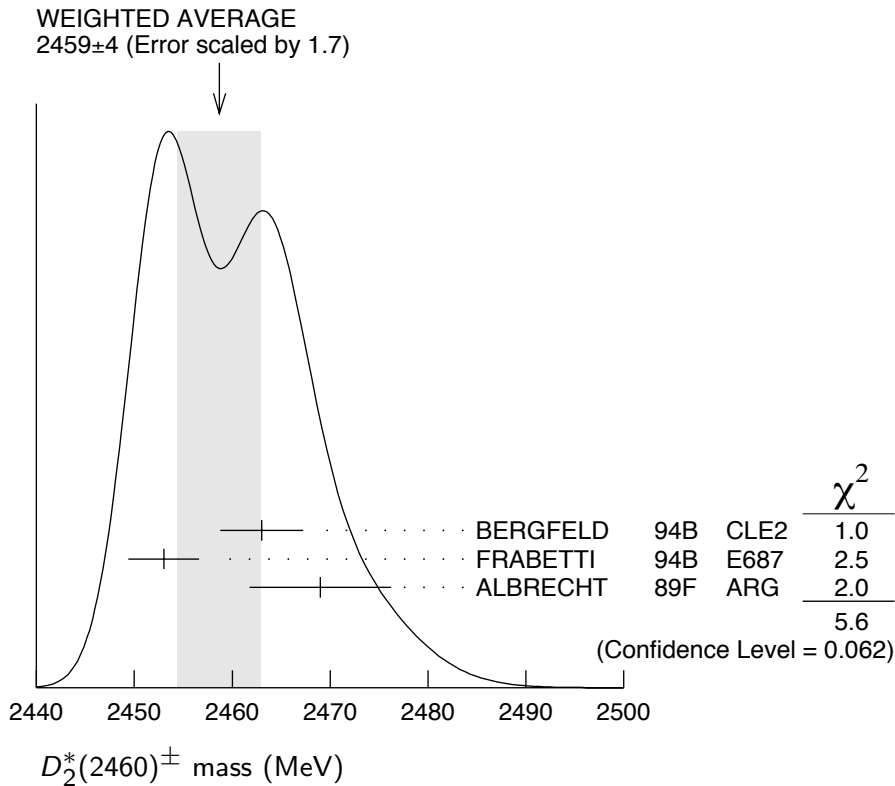
$$I(J^P) = \frac{1}{2}(2^+)$$

$J^P = 2^+$ assignment strongly favored(ALBRECHT 89B).

$D_2^*(2460)^\pm$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
2459 ±4	OUR AVERAGE	Error includes scale factor of 1.7. See the ideogram below.		
2463 ±3 ±3	310	BERGFELD	94B CLE2	$e^+e^- \rightarrow D^0\pi^+X$
2453 ±3 ±2	185	FRABETTI	94B E687	$\gamma Be \rightarrow D^0\pi^+X$
2469 ±4 ±6		ALBRECHT	89F ARG	$e^+e^- \rightarrow D^0\pi^+X$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
2467.6±1.5±0.8	3.5k	¹ LINK	04A FOCS	γA

¹Fit includes the contribution from $D_0^*(2400)^\pm$. Not independent of the corresponding mass difference measurement, $(m_{D_2^*(2460)^\pm}) - (m_{D_2^*(2460)^0})$.



$m_{D_2^*(2460)^\pm} - m_{D_2^*(2460)^0}$

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
2.4±1.7	OUR AVERAGE		
3.1±1.9±0.9	LINK	04A FOCS	γA
- 2 ±4 ±4	BERGFELD	94B CLE2	$e^+e^- \rightarrow$ hadrons
0 ±4	FRABETTI	94B E687	$\gamma Be \rightarrow D\pi X$
14 ±5 ±8	ALBRECHT	89F ARG	$e^+e^- \rightarrow D^0\pi^+X$

$D_2^*(2460)^\pm$ WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
29 ± 5 OUR AVERAGE				
34.1 ± 6.5 ± 4.2	3.5k	² LINK	04A FOCUS	γ A
27 $\begin{smallmatrix} +11 \\ -8 \end{smallmatrix}$ ± 5	310	BERGFELD	94B CLE2	$e^+ e^- \rightarrow D^0 \pi^+ X$
23 ± 9 ± 5	185	FRABETTI	94B E687	γ Be $\rightarrow D^0 \pi^+ X$

² Fit includes the contribution from $D_0^*(2400)^\pm$.

$D_2^*(2460)^\pm$ DECAY MODES

$D_2^*(2460)^-$ modes are charge conjugates of modes below.

Mode	Fraction (Γ_i/Γ)
Γ_1 $D^0 \pi^+$	seen
Γ_2 $D^{*0} \pi^+$	seen
Γ_3 $D^+ \pi^+ \pi^-$	not seen
Γ_4 $D^{*+} \pi^+ \pi^-$	not seen

$D_2^*(2460)^\pm$ BRANCHING RATIOS

$\Gamma(D^0 \pi^+)/\Gamma_{\text{total}}$	DOCUMENT ID	TECN	COMMENT	Γ_1/Γ
VALUE				
seen	ALBRECHT	89F ARG	$e^+ e^- \rightarrow D^0 \pi^+ X$	

$\Gamma(D^0 \pi^+)/\Gamma(D^{*0} \pi^+)$	DOCUMENT ID	TECN	COMMENT	Γ_1/Γ_2
VALUE				
1.9 ± 1.1 ± 0.3	BERGFELD	94B CLE2	$e^+ e^- \rightarrow$ hadrons	

$D_2^*(2460)^\pm$ REFERENCES

LINK	04A PL B586 11	J.M. Link <i>et al.</i>	(FOCUS Collab.)
BERGFELD	94B PL B340 194	T. Bergfeld <i>et al.</i>	(CLEO Collab.)
FRABETTI	94B PRL 72 324	P.L. Frabetti <i>et al.</i>	(FNAL E687 Collab.)
ALBRECHT	89B PL B221 422	H. Albrecht <i>et al.</i>	(ARGUS Collab.)
ALBRECHT	89F PL B231 208	H. Albrecht <i>et al.</i>	(ARGUS Collab.)

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