

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

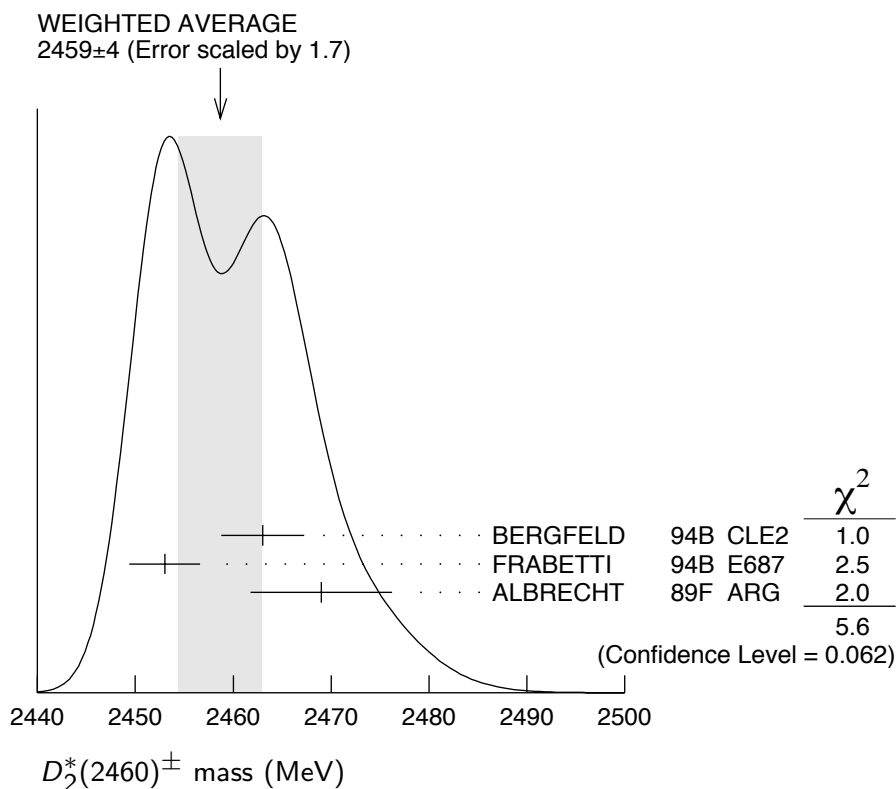
$$I(J^P) = \frac{1}{2}(2^+)$$

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

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

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
<b>2459 ±4 OUR AVERAGE</b>	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	$\gamma\text{Be} \rightarrow D^0\pi^+X$
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	<sup>1</sup> LINK	04A FOCS	$\gamma A$

<sup>1</sup>Fit 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
<b>2.4 ±1.7 OUR AVERAGE</b>			
3.1 ±1.9 ±0.9	LINK	04A FOCS	$\gamma A$
- 2 ±4 ±4	BERGFELD	94B CLE2	$e^+e^- \rightarrow$ hadrons
0 ±4	FRABETTI	94B E687	$\gamma\text{Be} \rightarrow D\pi X$
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
<b>29 ± 5</b>	<b>OUR AVERAGE</b>			
34.1 ± 6.5 ± 4.2	3.5k	<sup>2</sup> LINK	04A FOCUS	$\gamma$ 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	$\gamma$ Be $\rightarrow D^0 \pi^+ X$

<sup>2</sup> 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 ( $\Gamma_i/\Gamma$ )
$\Gamma_1$ $D^0 \pi^+$	seen
$\Gamma_2$ $D^{*0} \pi^+$	seen
$\Gamma_3$ $D^+ \pi^+ \pi^-$	not seen
$\Gamma_4$ $D^{*+} \pi^+ \pi^-$	not seen

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

$\Gamma(D^0 \pi^+)/\Gamma_{\text{total}}$	DOCUMENT ID	TECN	COMMENT	$\Gamma_1/\Gamma$
VALUE				
<b>seen</b>	ALBRECHT	89F ARG	$e^+ e^- \rightarrow D^0 \pi^+ X$	

$\Gamma(D^0 \pi^+)/\Gamma(D^{*0} \pi^+)$	DOCUMENT ID	TECN	COMMENT	$\Gamma_1/\Gamma_2$
VALUE				
<b>1.9 ± 1.1 ± 0.3</b>	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.)

**OTHER RELATED PAPERS**

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