

$D_2^*(2460)^\pm$

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

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

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

VALUE (MeV) EVTS DOCUMENT ID TECN COMMENT

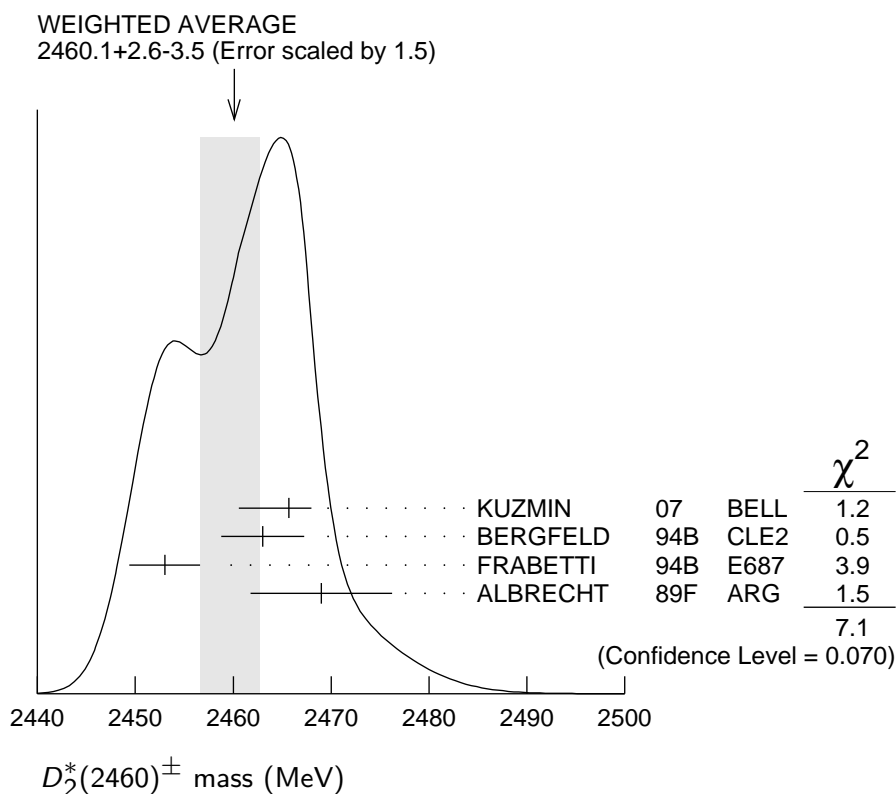
2460.1^{+2.6}_{-3.5} OUR AVERAGE Error includes scale factor of 1.5. See the ideogram below.

2465.7 ± 1.8 ^{+1.4} _{-4.8}	2909	KUZMIN	07	BELL	$e^+e^- \rightarrow \text{hadrons}$
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	¹ LINK	04A	FOCS	γA
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¹ Fit includes the contribution from $D_0^*(2400)^\pm$. Not independent of the corresponding mass difference measurement, $(m_{D_2^*(2460)^\pm}) - (m_{D_2^*(2460)0})$.



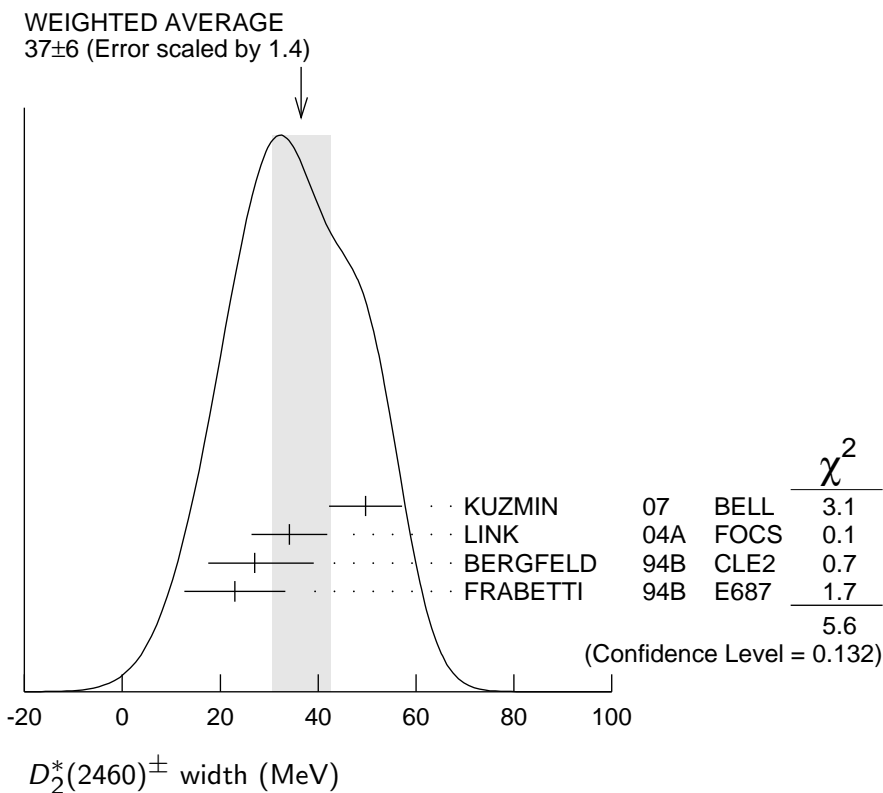
$m_{D_2^*(2460)^\pm} - m_{D_2^*(2460)^0}$

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
2.4 ± 1.7 OUR AVERAGE			
3.1 ± 1.9 ± 0.9	LINK	04A	FOCS γ A
- 2 ± 4 ± 4	BERGFELD	94B	CLE2 $e^+e^- \rightarrow$ hadrons
0 ± 4	FRABETTI	94B	E687 γ 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
37 ± 6 OUR AVERAGE	Error includes scale factor of 1.4. See the ideogram below.			
49.7 ± 3.8 ± 6.4	2909	KUZMIN	07	BELL $e^+e^- \rightarrow$ hadrons
34.1 ± 6.5 ± 4.2	3.5k	² LINK	04A	FOCS γ A
27 ⁺¹¹ / ₋₈ ± 5	310	BERGFELD	94B	CLE2 $e^+e^- \rightarrow D^0\pi^+ X$
23 ± 9 ± 5	185	FRABETTI	94B	E687 γ Be $\rightarrow D^0\pi^+ X$

²Fit 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

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

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

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

KUZMIN 07 PR D76 012006	A. Kuzmin <i>et al.</i>	(BELLE Collab.)
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

CLOSE 05C PR D72 094004	F.E. Close, E.S. Swanson	(OXFTP)
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