

$D_2^*(2460)^0$

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

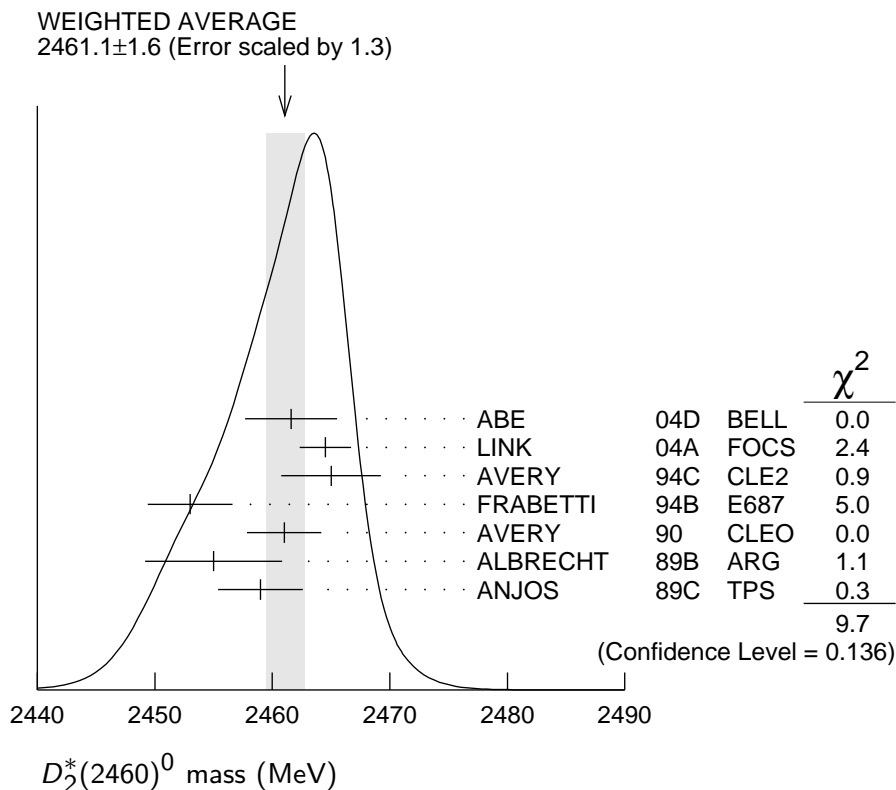
$J^P = 2^+$ assignment strongly favored (ALBRECHT 89B).

$D_2^*(2460)^0$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
2461.1±1.6 OUR AVERAGE Error includes scale factor of 1.3. See the ideogram below.				
2461.6±2.1±3.3		¹ ABE	04D BELL	$B^- \rightarrow D^+ \pi^- \pi^-$
2464.5±1.1±1.9	5.8k	¹ LINK	04A FOCS	γA
2465 ±3 ±3	486	AVERY	94C CLE2	$e^+ e^- \rightarrow D^+ \pi^- X$
2453 ±3 ±2	128	FRABETTI	94B E687	$\gamma Be \rightarrow D^+ \pi^- X$
2461 ±3 ±1	440	AVERY	90 CLEO	$e^+ e^- \rightarrow D^{*+} \pi^- X$
2455 ±3 ±5	337	ALBRECHT	89B ARG	$e^+ e^- \rightarrow D^+ \pi^- X$
2459 ±3 ±2	153	ANJOS	89C TPS	$\gamma N \rightarrow D^+ \pi^- X$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
2463.3±0.6±0.8	20k	ABULENCIA	06A CDF	1900 $p\bar{p} \rightarrow D^+ \pi^- X$
2461 ±6	126	² ABREU	98M DLPH	$e^+ e^-$
2466 ±7	1	ASRATYAN	95 BEBC	53,40 $\nu(\bar{\nu}) \rightarrow p + X,$ $d + X$

¹ Fit includes the contribution from $D_0^*(2400)^0$.

² No systematic error given.



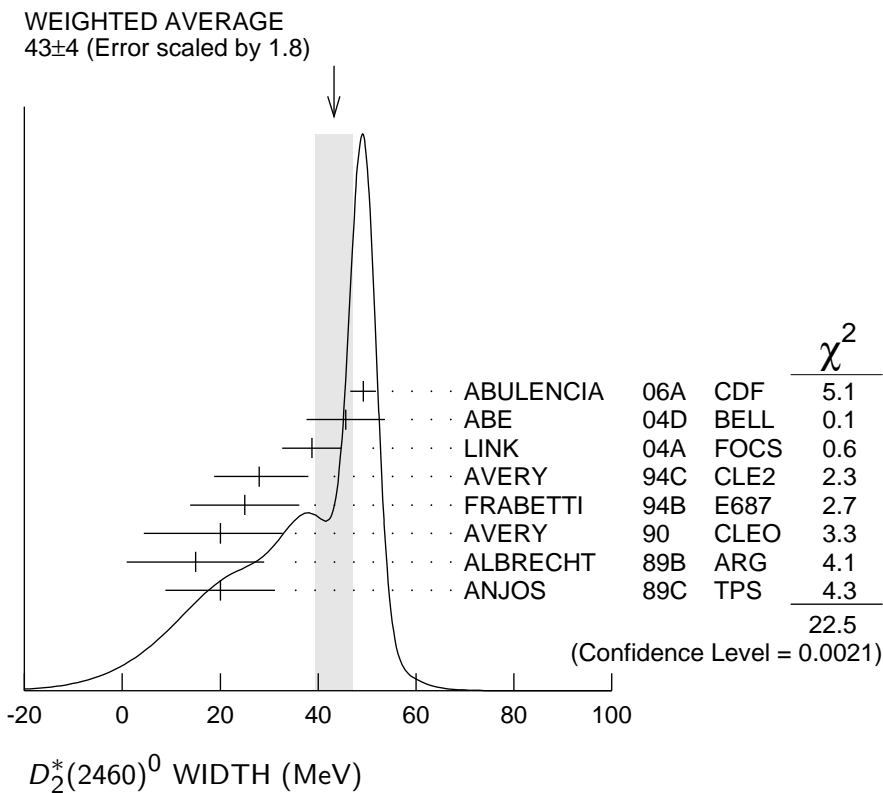
$m_{D_2^0} - m_{D^+}$

VALUE	EVTS	DOCUMENT ID	TECN	COMMENT
593.9 ± 0.6 ± 0.5	20k	ABULENCIA	06A	CDF 1900 $p\bar{p} \rightarrow D^+ \pi^- X$

$D_2^*(2460)^0$ WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
43 ± 4 OUR AVERAGE	Error	includes scale factor of 1.8. See the ideogram below.		
49.2 ± 2.3 ± 1.3	20k	ABULENCIA	06A	CDF 1900 $p\bar{p} \rightarrow D^+ \pi^- X$
45.6 ± 4.4 ± 6.7		³ ABE	04D	BELL $B^- \rightarrow D^+ \pi^- \pi^-$
38.7 ± 5.3 ± 2.9	5.8k	³ LINK	04A	FOCS γA
28 ⁺⁸ ₋₇ ± 6	486	AVERY	94C	CLE2 $e^+ e^- \rightarrow D^+ \pi^- X$
25 ± 10 ± 5	128	FRABETTI	94B	E687 $\gamma Be \rightarrow D^+ \pi^- X$
20 ⁺⁹ ₋₁₂ ⁺⁹ ₋₁₀	440	AVERY	90	CLEO $e^+ e^- \rightarrow D^{*+} \pi^- X$
15 ⁺¹³ ₋₁₀ ⁺⁵ ₋₁₀	337	ALBRECHT	89B	ARG $e^+ e^- \rightarrow D^+ \pi^- X$
20 ± 10 ± 5	153	ANJOS	89C	TPS $\gamma N \rightarrow D^+ \pi^- X$

³ Fit includes the contribution from $D_0^*(2400)^0$.



$D_2^*(2460)^0$ DECAY MODES

$\bar{D}_2^*(2460)^0$ modes are charge conjugates of modes below.

Mode	Fraction (Γ_i/Γ)
Γ_1 $D^+ \pi^-$	seen
Γ_2 $D^*(2010)^+ \pi^-$	seen
Γ_3 $D^0 \pi^+ \pi^-$	not seen
Γ_4 $D^{*0} \pi^+ \pi^-$	not seen

$D_2^*(2460)^0$ BRANCHING RATIOS

$\Gamma(D^+ \pi^-)/\Gamma_{\text{total}}$					Γ_1/Γ
<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
seen	337	ALBRECHT	89B ARG	$e^+ e^- \rightarrow D^+ \pi^- X$	
seen		ANJOS	89C TPS	$\gamma N \rightarrow D^+ \pi^- X$	
$\Gamma(D^*(2010)^+ \pi^-)/\Gamma_{\text{total}}$					Γ_2/Γ
<u>VALUE</u>		<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
seen		ACKERSTAFF	97W OPAL	$e^+ e^- \rightarrow D^{*+} \pi^- X$	
seen		AVERY	90 CLEO	$e^+ e^- \rightarrow D^{*+} \pi^- X$	
seen		ALBRECHT	89H ARG	$e^+ e^- \rightarrow D^* \pi^- X$	
$\Gamma(D^+ \pi^-)/\Gamma(D^*(2010)^+ \pi^-)$					Γ_1/Γ_2
<u>VALUE</u>		<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>	
2.3\pm0.6 OUR AVERAGE					
2.2 \pm 0.7 \pm 0.6		AVERY	94C CLE2	$e^+ e^- \rightarrow D^{*+} \pi^- X$	
2.3 \pm 0.8		AVERY	90 CLEO	$e^+ e^-$	
3.0 \pm 1.1 \pm 1.5		ALBRECHT	89H ARG	$e^+ e^- \rightarrow D^* \pi^- X$	
• • • We do not use the following data for averages, fits, limits, etc. • • •					
1.9 \pm 0.5		ABE	04D BELL	$B^- \rightarrow D^{(*)+} \pi^- \pi^-$	

$D_2^*(2460)^0$ REFERENCES

ABULENCIA	06A	PR D73 051104	A. Abulencia <i>et al.</i>	(CDF Collab.)
ABE	04D	PR D69 112002	K. Abe <i>et al.</i>	(BELLE Collab.)
LINK	04A	PL B586 11	J.M. Link <i>et al.</i>	(FOCUS Collab.)
ABREU	98M	PL B426 231	P. Abreu <i>et al.</i>	(DELPHI Collab.)
ACKERSTAFF	97W	ZPHY C76 425	K. Ackerstaff <i>et al.</i>	(OPAL Collab.)
ASRATYAN	95	ZPHY C68 43	A.E. Asratyan <i>et al.</i>	(BIRM, BELG, CERN+)
AVERY	94C	PL B331 236	P. Avery <i>et al.</i>	(CLEO Collab.)
FRABETTI	94B	PRL 72 324	P.L. Frabetti <i>et al.</i>	(FNAL E687 Collab.)
AVERY	90	PR D41 774	P. Avery, D. Besson	(CLEO Collab.)
ALBRECHT	89B	PL B221 422	H. Albrecht <i>et al.</i>	(ARGUS Collab.) JP
ALBRECHT	89H	PL B232 398	H. Albrecht <i>et al.</i>	(ARGUS Collab.) JP
ANJOS	89C	PRL 62 1717	J.C. Anjos <i>et al.</i>	(FNAL E691 Collab.)

————— **OTHER RELATED PAPERS** —————

AUBERT	08G	PRL 100 171803	B. Aubert <i>et al.</i>	(BABAR Collab.)
ANTIPIN	07	PL B647 164	O. Antipin, G. Valencia	
AUBERT	06L	PR D74 012001	B. Aubert <i>et al.</i>	(BABAR Collab.)
ABAZOV	05O	PRL 95 171803	V.M. Abazov <i>et al.</i>	(D0 Collab.)
ACOSTA	05F	PR D71 051103R	D. Acosta <i>et al.</i>	(CDF Collab.)
CLOSE	05C	PR D72 094004	F.E. Close, E.S. Swanson	(OXFTP)
SEMENOV	99	SPU 42 847	S.V. Semenov	
		Translated from UFN 42 937.		
