

$f_2(2300)$

$$I^G(J^{PC}) = 0^+(2^{++})$$

$f_2(2300)$ MASS

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
2297 ± 28	¹ ETKIN	88 MPS	22 $\pi^- p \rightarrow \phi \phi n$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●			
2270 ± 12	VLADIMIRSK...06	SPEC	40 $\pi^- p \rightarrow K_S^0 K_S^0 n$
2327 ± 9 ± 6	ABE	04 BELL	10.6 $e^+ e^- \rightarrow e^+ e^- K^+ K^-$
2240 ± 15	ANISOVICH	00J SPEC	$p \bar{p} \rightarrow \pi^0 \pi^0 \eta$
2231 ± 10	BOOTH	86 OMEG	85 $\pi^- Be \rightarrow 2\phi Be$
2220 ⁺⁹⁰ ₋₂₀	LINDENBAUM	84 RVUE	
2320 ± 40	ETKIN	82 MPS	22 $\pi^- p \rightarrow 2\phi n$

¹Includes data of ETKIN 85. The percentage of the resonance going into $\phi\phi$ 2^{++} S_2 , D_2 , and D_0 is 6^{+15}_{-5} , 25^{+18}_{-14} , and 69^{+16}_{-27} , respectively.

$f_2(2300)$ WIDTH

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
149 ± 41	² ETKIN	88 MPS	22 $\pi^- p \rightarrow \phi \phi n$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●			
90 ± 29	VLADIMIRSK...06	SPEC	40 $\pi^- p \rightarrow K_S^0 K_S^0 n$
275 ± 36 ± 20	ABE	04 BELL	10.6 $e^+ e^- \rightarrow e^+ e^- K^+ K^-$
241 ± 30	ANISOVICH	00J SPEC	$p \bar{p} \rightarrow \pi^0 \pi^0 \eta$
133 ± 50	BOOTH	86 OMEG	85 $\pi^- Be \rightarrow 2\phi Be$
200 ± 50	LINDENBAUM	84 RVUE	
220 ± 70	ETKIN	82 MPS	22 $\pi^- p \rightarrow 2\phi n$

²Includes data of ETKIN 85.

$f_2(2300)$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
Γ_1 $\phi\phi$	seen
Γ_2 $K\bar{K}$	seen
Γ_3 $\gamma\gamma$	seen

$f_2(2300)$ $\Gamma(i)\Gamma(\gamma\gamma)/\Gamma(\text{total})$

$\Gamma(K\bar{K}) \times \Gamma(\gamma\gamma)/\Gamma_{\text{total}}$	DOCUMENT ID	TECN	COMMENT	$\Gamma_2\Gamma_3/\Gamma$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
44 ± 6 ± 12	³ ABE	04 BELL	10.6 $e^+ e^- \rightarrow e^+ e^- K^+ K^-$	

³Assuming spin 2.

$f_2(2300)$ REFERENCES

VLADIMIRSK...	06	PAN 69 493	V.V. Vladimirsky <i>et al.</i>	(ITEP, Moscow)
		Translated from YAF 69 515.		
ABE	04	EPJ C32 323	K. Abe <i>et al.</i>	(BELLE Collab.)
ANISOVICH	00J	PL B491 47	A.V. Anisovich <i>et al.</i>	
ETKIN	88	PL B201 568	A. Etkin <i>et al.</i>	(BNL, CUNY)
BOOTH	86	NP B273 677	P.S.L. Booth <i>et al.</i>	(LIVP, GLAS, CERN)
ETKIN	85	PL 165B 217	A. Etkin <i>et al.</i>	(BNL, CUNY)
LINDENBAUM	84	CNPP 13 285	S.J. Lindenbaum	(CUNY)
ETKIN	82	PRL 49 1620	A. Etkin <i>et al.</i>	(BNL, CUNY)

OTHER RELATED PAPERS

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		Translated from ZETFP 80 845.		
ANISOVICH	05A	JETPL 81 417	V.V. Anisovich, A.V. Sarantsev	
		Translated from ZETFP 81 531.		
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BOOTH	84	NP B242 51	P.S.L. Booth <i>et al.</i>	(LIVP, GLAS, CERN)
EISENHAND...	75	NP B96 109	E. Eisenhandler <i>et al.</i>	(LOQM, LIVP, DARE+)