

$f_2(2300)$

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

See also the mini-review under non- $q\bar{q}$ candidates. (See the index for the page number.)

$f_2(2300)$ 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. ● ● ●			
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 $\pi^- \text{Be} \rightarrow 2\phi\text{Be}$
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. ● ● ●			
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 $\pi^- \text{Be} \rightarrow 2\phi\text{Be}$
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 $e^+e^- \rightarrow e^+e^-K^+K^-$	

³ Assuming spin 2.

$f_2(2300)$ REFERENCES

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

LONGACRE	04	PR D70 094041	R.S. Longacre, S.J. Lindenbaum	
AMELIN	00	NP A668 83	D. Amelin <i>et al.</i>	(VES Collab.)
BOLONKIN	00	JETPL 72 166	B.V. Bolonkin <i>et al.</i>	
		Translated from ZETFP 72 240.		
BARBERIS	98	PL B432 436	D. Barberis <i>et al.</i>	(Omega Expt.)
LANDBERG	96	PR D53 2839	C. Landberg <i>et al.</i>	(BNL, CUNY, RPI)
GREEN	86	PRL 56 1639	D.R. Green <i>et al.</i>	(FNAL, ARIZ, FSU+)
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+)
