

$f_2(2300)$

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

 $f_2(2300)$ 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

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

$\Gamma(K\bar{K}) \times \Gamma(\gamma\gamma)/\Gamma_{\text{total}}$	$\Gamma_2\Gamma_3/\Gamma$		
VALUE (eV)	DOCUMENT ID	TECN	COMMENT
● ● ● 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. Vladimisky <i>et al.</i>	(ITEP, Moscow)
ABE	04	Translated from 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)
