$f_2(2300)$

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

$f_2(2300)$ MASS

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
2297±28	[1] ETKIN	88	MPS	22 $\pi^- p \to \phi\phi n$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
$2243^{+\ 7+\ 3}_{-\ 6-29}$	[2] UEHARA	13	BELL	$\gamma\gamma \to K^0_S K^0_S$
2270±12	VLADIMIRSK...06		SPEC	40 $\pi^- p \to K^0_S K^0_S n$
2327± 9± 6	ABE	04	BELL	10.6 $e^+e^- \to e^+e^- K^+K^-$
2231±10	BOOTH	86	OMEG	85 π^- Be $\to 2\phi$Be
2220^{+90}_{-20}	LINDENBAUM	84	RVUE	
2320±40	ETKIN	82	MPS	22 $\pi^- p \to 2\phi n$

[1] Includes 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.

[2] Spin 2 preferred, tentatively assigned to $f_2(2300)$.

$f_2(2300)$ WIDTH

VALUE (MeV)	*DOCUMENT ID*		*TECN*	*COMMENT*
149±41	[3] ETKIN	88	MPS	22 $\pi^- p \to \phi\phi n$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
$145\pm12^{+27}_{-34}$	[4] UEHARA	13	BELL	$\gamma\gamma \to K^0_S K^0_S$
90±29	VLADIMIRSK...06		SPEC	40 $\pi^- p \to K^0_S K^0_S n$
275±36±20	ABE	04	BELL	10.6 $e^+e^- \to e^+e^- K^+K^-$
133±50	BOOTH	86	OMEG	85 π^- Be $\to 2\phi$Be
200±50	LINDENBAUM	84	RVUE	
220±70	ETKIN	82	MPS	22 $\pi^- p \to 2\phi n$

[3] Includes data of ETKIN 85.

[4] Spin 2 preferred, tentatively assigned to $f_2(2300)$.

$f_2(2300)$ DECAY MODES

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

$f_2(2300)$ Γ(i)Γ(γγ)/Γ(total)

$\Gamma(K\overline{K}) \times \Gamma(\gamma\gamma)/\Gamma_{total}$ **$\Gamma_2\Gamma_3/\Gamma$**

VALUE (eV)	*DOCUMENT ID*		*TECN*	*COMMENT*
• • • We do not use the following data for averages, fits, limits, etc. • • •				
$3.2^{+0.5+1.3}_{-0.4-2.2}$	UEHARA	13	BELL	$\gamma\gamma \to K^0_S K^0_S$
44 ±6 ±12	[5] ABE	04	BELL	10.6 $e^+e^- \to e^+e^- K^+K^-$

[5] Assuming spin 2.

$f_2(2300)$ REFERENCES

UEHARA	13	PTEP 2013 123C01	S. Uehara *et al.*	(BELLE Collab.)
VLADIMIRSK...	06	PAN 69 493	V.V. Vladimirsky *et al.*	(ITEP, Moscow)
		Translated from YAF 69 515.		
ABE	04	EPJ C32 323	K. Abe *et al.*	(BELLE Collab.)
ETKIN	88	PL B201 568	A. Etkin *et al.*	(BNL, CUNY)
BOOTH	86	NP B273 677	P.S.L. Booth *et al.*	(LIVP, GLAS, CERN)
ETKIN	85	PL 165B 217	A. Etkin *et al.*	(BNL, CUNY)
LINDENBAUM	84	CNPP 13 285	S.J. Lindenbaum	(CUNY)
ETKIN	82	PRL 49 1620	A. Etkin *et al.*	(BNL, CUNY)