

$f_2(2300)$ 

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

### $f_2(2300)$ MASS

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

<sup>1</sup>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.

### $f_2(2300)$ WIDTH

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
<b>149±41</b>	<sup>2</sup> ETKIN	88	MPS 22 $\pi^- p \rightarrow \phi\phi n$
• • • We do not use the following data for averages, fits, limits, etc. • • •			
145±12 <sup>+</sup> <sub>-34</sub> 27	UEHARA	13	BELL $\gamma\gamma \rightarrow K_S^0 K_S^0$
90±29	VLADIMIRSK...06	SPEC	40 $\pi^- p \rightarrow K_S^0 K_S^0 n$
275±36±20	ABE	04	BELL 10.6 $e^+ e^- \rightarrow e^+ e^- K^+ K^-$
133±50	BOOTH	86	OMEG 85 $\pi^- Be \rightarrow 2\phi Be$
200±50	LINDENBAUM 84	RVUE	
220±70	ETKIN	82	MPS 22 $\pi^- p \rightarrow 2\phi n$

<sup>2</sup>Includes data of ETKIN 85.

### $f_2(2300)$ DECAY MODES

Mode	Fraction ( $\Gamma_i/\Gamma$ )
$\Gamma_1$ $\phi\phi$	seen
$\Gamma_2$ $K\bar{K}$	seen
$\Gamma_3$ $\gamma\gamma$	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. • • •

$3.2^{+0.5+1.3}_{-0.4-2.2}$ 44 $\pm 6 \pm 12$	UEHARA <sup>3</sup> ABE	13    BELL 04    BELL	$\gamma\gamma \rightarrow K_S^0 K_S^0$ $10.6 e^+ e^- \rightarrow e^+ e^- K^+ K^-$
--	----------------------------	--------------------------	--

<sup>3</sup> Assuming spin 2.

### $f_2(2300)$ REFERENCES

UEHARA	13	PTEP 2013 123C01	S. Uehara <i>et al.</i>	(BELLE Collab.)
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.)
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)