

# $f_2(2300)$

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

## $f_2(2300)$ MASS

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
<b>2297±28</b>	1 ETKIN	88 MPS	$22 \pi^- p \rightarrow \phi\phi n$
<b>• • •</b> We do not use the following data for averages, fits, limits, etc. <b>• • •</b>			
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	$22 \pi^- p \rightarrow 2\phi n$

<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>	2 ETKIN	88 MPS	$22 \pi^- p \rightarrow \phi\phi n$
<b>• • •</b> We do not use the following data for averages, fits, limits, etc. <b>• • •</b>			
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	$22 \pi^- p \rightarrow 2\phi n$

<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

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

$$\Gamma(K\bar{K}) \times \Gamma(\gamma\gamma)/\Gamma_{\text{total}} \quad \Gamma_2\Gamma_3/\Gamma$$

VALUE (eV)	DOCUMENT ID	TECN	COMMENT
<b>• • •</b> We do not use the following data for averages, fits, limits, etc. <b>• • •</b>			
44±6±12	<sup>3</sup> ABE 04	BELL	$10.6 e^+ e^- \rightarrow e^+ e^- K^+ K^-$

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

## $f_2(2300)$ REFERENCES

VLADIMIRSK...	06	PAN 69 493 Translated from YAF 69 515.	V.V. Vladimirsy <i>et al.</i>	(ITEP, Moscow)
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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GREEN	86	PRL 56 1639	D.R. Green <i>et al.</i>	(FNAL, ARIZ, FSU+)
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EISENHAND...	75	NP B96 109	E. Eisenhandler <i>et al.</i>	(LOQM, LIVP, DARE+)