

$f_2(2010)$

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

NODE=M106

 $f_2(2010)$ MASS

NODE=M106M

NODE=M106M

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
2011^{+62}_{-76}	¹ ETKIN	88 MPS	$22 \pi^- p \rightarrow \phi \phi n$
• • • We do not use the following data for averages, fits, limits, etc. • • •			
$2062 \pm 6^{+10}_{-7}$	² ABLIKIM	22AS BES3	$J/\psi(1S) \rightarrow \gamma \eta \eta'$
2005 ± 12	VLADIMIRSK...06	SPEC	$40 \pi^- p \rightarrow K_S^0 K_S^0 n$
2049^{+35}_{-24}	³ LONGACRE	04 RVUE	$22 \pi^- p \rightarrow \phi \phi n, 450$ $pp \rightarrow pf 4\pi p_s$
1980 ± 20	⁴ BOLONKIN	88 SPEC	$40 \pi^- p \rightarrow K_S^0 K_S^0 n$
2050^{+90}_{-50}	ETKIN	85 MPS	$22 \pi^- p \rightarrow 2\phi n$
2120^{+20}_{-120}	LINDENBAUM	84 RVUE	
2160 ± 50	ETKIN	82 MPS	$22 \pi^- p \rightarrow 2\phi n$

¹ Includes data of ETKIN 85. The percentage of the resonance going into $\phi \phi 2^{++} S_2$, D_2 , and D_0 is 98^{+1}_{-3} , 0^{+1}_{-0} , and 2^{+2}_{-1} , respectively.

² From a Breit-Wigner fit involving 9 resonances and a resonating exotic $\eta_1(1855) \rightarrow \eta \eta'$ P-wave.

³ From a four pole K-matrix reanalysis of ETKIN 88 and BARBERIS 00C data.

⁴ Statistically very weak, only 1.4 s.d.

NODE=M106M;LINKAGE=C

NODE=M106M;LINKAGE=A

NODE=M106M;LINKAGE=B

NODE=M106M;LINKAGE=E

 $f_2(2010)$ WIDTH

NODE=M106W

NODE=M106W

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
202^{+67}_{-62}	⁵ ETKIN	88 MPS	$22 \pi^- p \rightarrow \phi \phi n$
• • • We do not use the following data for averages, fits, limits, etc. • • •			
$165 \pm 17^{+10}_{-5}$	⁶ ABLIKIM	22AS BES3	$J/\psi(1S) \rightarrow \gamma \eta \eta'$
209 ± 32	VLADIMIRSK...06	SPEC	$40 \pi^- p \rightarrow K_S^0 K_S^0 n$
567^{+64}_{-71}	⁷ LONGACRE	04 RVUE	$22 \pi^- p \rightarrow \phi \phi n, 450$ $pp \rightarrow pf 4\pi p_s$
145 ± 50	⁸ BOLONKIN	88 SPEC	$40 \pi^- p \rightarrow K_S^0 K_S^0 n$
200^{+160}_{-50}	ETKIN	85 MPS	$22 \pi^- p \rightarrow 2\phi n$
300^{+150}_{-50}	LINDENBAUM	84 RVUE	
310 ± 70	ETKIN	82 MPS	$22 \pi^- p \rightarrow 2\phi n$

⁵ Includes data of ETKIN 85.

⁶ From a Breit-Wigner fit involving 9 resonances and a resonating exotic $\eta_1(1855) \rightarrow \eta \eta'$ P-wave.

⁷ From a four pole K-matrix reanalysis of ETKIN 88 and BARBERIS 00C data

⁸ Statistically very weak, only 1.4 s.d.

NODE=M106W;LINKAGE=C

NODE=M106W;LINKAGE=A

NODE=M106W;LINKAGE=B

NODE=M106W;LINKAGE=E

 $f_2(2010)$ DECAY MODES

NODE=M106215;NODE=M106

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \quad \phi \phi$	seen
$\Gamma_2 \quad K \bar{K}$	seen

DESIG=1;OUR EST;→ UNCHECKED ←
DESIG=2

 $f_2(2010)$ BRANCHING RATIOS

NODE=M106230

$\Gamma(K\bar{K})/\Gamma_{\text{total}}$			Γ_2/Γ
VALUE	DOCUMENT ID	TECN	COMMENT
seen	VLADIMIRSK...06	SPEC	$40 \pi^- p \rightarrow K_S^0 K_S^0 n$

NODE=M106R01
NODE=M106R01

f₂(2010) REFERENCES

ABLIKIM	22AS	PR D106 072012	M. Ablikim <i>et al.</i>	(BESIII Collab.)
Also		PR D107 079901 (errat.)	M. Ablikim <i>et al.</i>	(BESIII Collab.)
VLADIMIRSK...	06	PAN 69 493	V.V. Vladimirsky <i>et al.</i>	(ITEP, Moscow)
		Translated from YAF 69 515.		
LONGACRE	04	PR D70 094041	R.S. Longacre, S.J. Lindenbaum	(BNL, CUNY)
BARBERIS	00C	PL B471 440	D. Barberis <i>et al.</i>	(WA 102 Collab.)
BOLONKIN	88	NP B309 426	B.V. Bolonkin <i>et al.</i>	(ITEP, SERP)
ETKIN	88	PL B201 568	A. Etkin <i>et al.</i>	(BNL, CUNY)
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)
Also		Brighton Conf. 351	S.J. Lindenbaum	(BNL, CUNY)

NODE=M106

REFID=61891
 REFID=62033
 REFID=51191

 REFID=50341
 REFID=47959
 REFID=40580
 REFID=40285
 REFID=21871
 REFID=21869
 REFID=21866
 REFID=21867