

# $f_2(2010)$

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

## $f_2(2010)$ MASS

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
<b>2011<sup>+62</sup><sub>-76</sub></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. ● ● ●			
2062 ± 6 <sup>+10</sup> <sub>-7</sub>	<sup>2</sup> ABLIKIM	22AS BES3	$J/\psi(1S) \rightarrow \gamma \eta \eta'$
2005 ± 12	VLADIMIRSK...06	SPEC	40 $\pi^- p \rightarrow K_S^0 K_S^0 n$
1980 ± 20	<sup>3</sup> BOLONKIN	88 SPEC	40 $\pi^- p \rightarrow K_S^0 K_S^0 n$
2050 <sup>+90</sup> <sub>-50</sub>	ETKIN	85 MPS	22 $\pi^- p \rightarrow 2\phi n$
2120 <sup>+20</sup> <sub>-120</sub>	LINDENBAUM	84 RVUE	
2160 ± 50	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  $98^{+1}_-3$ ,  $0^{+1}_-0$ , and  $2^{+2}_-1$ , respectively.

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

<sup>3</sup> Statistically very weak, only 1.4 s.d.

## $f_2(2010)$ WIDTH

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
<b>202<sup>+67</sup><sub>-62</sub></b>	<sup>4</sup> ETKIN	88 MPS	22 $\pi^- p \rightarrow \phi \phi n$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●			
165 ± 17 <sup>+10</sup> <sub>-5</sub>	<sup>5</sup> ABLIKIM	22AS BES3	$J/\psi(1S) \rightarrow \gamma \eta \eta'$
209 ± 32	VLADIMIRSK...06	SPEC	40 $\pi^- p \rightarrow K_S^0 K_S^0 n$
145 ± 50	<sup>6</sup> BOLONKIN	88 SPEC	40 $\pi^- p \rightarrow K_S^0 K_S^0 n$
200 <sup>+160</sup> <sub>-50</sub>	ETKIN	85 MPS	22 $\pi^- p \rightarrow 2\phi n$
300 <sup>+150</sup> <sub>-50</sub>	LINDENBAUM	84 RVUE	
310 ± 70	ETKIN	82 MPS	22 $\pi^- p \rightarrow 2\phi n$

<sup>4</sup> Includes data of ETKIN 85.

<sup>5</sup> From a Breit-Wigner fit involving 9 resonances and a resonating exotic  $\eta_1(1855) \rightarrow \eta \eta'$  *P*-wave.

<sup>6</sup> Statistically very weak, only 1.4 s.d.

## $f_2(2010)$ DECAY MODES

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

## $f_2(2010)$ BRANCHING RATIOS

$\Gamma(K\bar{K})/\Gamma_{\text{total}}$				$\Gamma_2/\Gamma$
VALUE	DOCUMENT ID	TECN	COMMENT	
<b>seen</b>	VLADIMIRSK...06	SPEC	$40 \pi^- p \rightarrow K_S^0 K_S^0 n$	

## $f_2(2010)$ 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.		
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)