

# $f_2(1640)$

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

OMITTED FROM SUMMARY TABLE

## $f_2(1640)$ MASS

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>1639 ± 6 OUR AVERAGE</b>	Error includes scale factor of 1.2.		
1620 ± 16	BUGG	95	MRK3 $J/\psi \rightarrow \gamma \pi^+ \pi^- \pi^+ \pi^-$
1647 ± 7	ADAMO	92	OBLX $\bar{n}p \rightarrow 3\pi^+ 2\pi^-$
1635 ± 7	ALDE	90	GAM2 $38 \pi^- p \rightarrow \omega \omega n$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●			
1640 ± 5	AMSLER	06	CBAR $0.9 \bar{p}p \rightarrow K^+ K^- \pi^0$
1659 ± 6	VLADIMIRSK...06	SPEC	40 $\pi^- p \rightarrow K_S^0 K_S^0 n$
1643 ± 7	<sup>1</sup> ALDE	89B	GAM2 $38 \pi^- p \rightarrow \omega \omega n$
<sup>1</sup> Superseded by ALDE 90.			

## $f_2(1640)$ WIDTH

<u>VALUE (MeV)</u>	<u>CL%</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>100<sup>+60</sup><sub>-40</sub> OUR AVERAGE</b>		Error includes scale factor of 2.9.		
140 <sup>+60</sup> <sub>-20</sub>		BUGG	95	MRK3 $J/\psi \rightarrow \gamma \pi^+ \pi^- \pi^+ \pi^-$
58 ± 20		ADAMO	92	OBLX $\bar{n}p \rightarrow 3\pi^+ 2\pi^-$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
44 ± 9		AMSLER	06	CBAR $0.9 \bar{p}p \rightarrow K^+ K^- \pi^0$
152 ± 18		VLADIMIRSK...06	SPEC	40 $\pi^- p \rightarrow K_S^0 K_S^0 n$
< 70	90	ALDE	90	GAM2 $38 \pi^- p \rightarrow \omega \omega n$

## $f_2(1640)$ DECAY MODES

Mode	Fraction ( $\Gamma_i/\Gamma$ )
$\Gamma_1$ $\omega \omega$	seen
$\Gamma_2$ $4\pi$	seen
$\Gamma_3$ $K \bar{K}$	seen

## $f_2(1640)$ BRANCHING RATIOS

$\Gamma(K \bar{K})/\Gamma_{\text{total}}$	$\Gamma_3/\Gamma$		
<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
seen	AMSLER	06	CBAR $0.9 \bar{p}p \rightarrow K^+ K^- \pi^0$

## $f_2(1640)$ REFERENCES

AMSLER	06	PL B639 165	C. Amsler <i>et al.</i>	(Crystal Barrel Collab.)
VLADIMIRSK...	06	PAN 69 493	V.V. Vladimirsky <i>et al.</i>	(ITEP, Moscow)
		Translated from YAF 69 515.		
BUGG	95	PL B353 378	D.V. Bugg <i>et al.</i>	(LOQM, PNPI, WASH) JP
ADAMO	92	PL B287 368	A. Adamo <i>et al.</i>	(OBELIX Collab.)
ALDE	90	PL B241 600	D.M. Alde <i>et al.</i>	(SERP, BELG, LANL, LAPP+)
ALDE	89B	PL B216 451	D.M. Alde <i>et al.</i>	(SERP, BELG, LANL, LAPP+) IGJPC

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