

$f_2(1640)$

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

OMITTED FROM SUMMARY TABLE

$f_2(1640)$ MASS				
VALUE (MeV)	DOCUMENT ID	TECN	COMMENT	
1639± 6 OUR AVERAGE	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	¹ ALDE	89B	GAM2	38 $\pi^- p \rightarrow \omega \omega n$
¹ Superseded by ALDE 90.				

$f_2(1640)$ WIDTH				
VALUE (MeV)	CL%	DOCUMENT ID	TECN	COMMENT
100^{+60}_{-40} OUR AVERAGE		Error includes scale factor of 2.9.		
140^{+60}_{-20}		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 (Γ_i/Γ)
$\Gamma_1 \quad \omega \omega$	seen
$\Gamma_2 \quad 4 \pi$	seen
$\Gamma_3 \quad K \bar{K}$	seen

$f_2(1640)$ BRANCHING RATIOS			
$\Gamma(K \bar{K})/\Gamma_{\text{total}}$			Γ_3/Γ
VALUE	DOCUMENT ID	TECN	COMMENT
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
