NODE=M117

$f_2(1640)$

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

OMITTED FROM SUMMARY TABLE

$f_2(1640)$ MASS

NODE=M117M

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

[1] Superseded by ALDE 90.

NODE=M117M;LINKAGE=BB

$f_2(1640)$ WIDTH

NODE=M117W

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

NODE=M117W

$f_2(1640)$ DECAY MODES

NODE=M117215;NODE=M117

	Mode	Fraction (Γ_i/Γ)	
Γ_1	$\omega\omega$	seen	DESIG=1;OUR EST;→ UNCHECKED ←
Γ_2	4π	seen	DESIG=2;OUR EST;→ UNCHECKED ←
Γ_3	$K\overline{K}$	seen	DESIG=3

$f_2(1640)$ BRANCHING RATIOS

NODE=M117220

$\Gamma(K\overline{K})/\Gamma_{\text{total}}$ Γ_3/Γ

NODE=M117R2

VALUE	*DOCUMENT ID*		*TECN*	*COMMENT*
seen	AMSLER	06	CBAR	0.9 $\overline{p}p \to K^+K^-\pi^0$

NODE=M117R2

$f_2(1640)$ REFERENCES

NODE=M117

AMSLER	06	PL B639 165	C. Amsler *et al.*	(Crystal Barrel Collab.)	REFID=51136
VLADIMIRSK...	06	PAN 69 493 Translated from YAF 69 515.	V.V. Vladimirsky *et al.*	(ITEP, Moscow)	REFID=51191
BUGG	95	PL B353 378	D.V. Bugg *et al.*	(LOQM, PNPI, WASH) JP	REFID=44438
ADAMO	92	PL B287 368	A. Adamo *et al.*	(OBELIX Collab.)	REFID=42177
ALDE	90	PL B241 600	D.M. Alde *et al.*	(SERP, BELG, LANL, LAPP+)	REFID=40935
ALDE	89B	PL B216 451	D.M. Alde *et al.*	(SERP, BELG, LANL, LAPP+) IGJPC	REFID=40735