$f_2(1640)$

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

OMITTED FROM SUMMARY TABLE
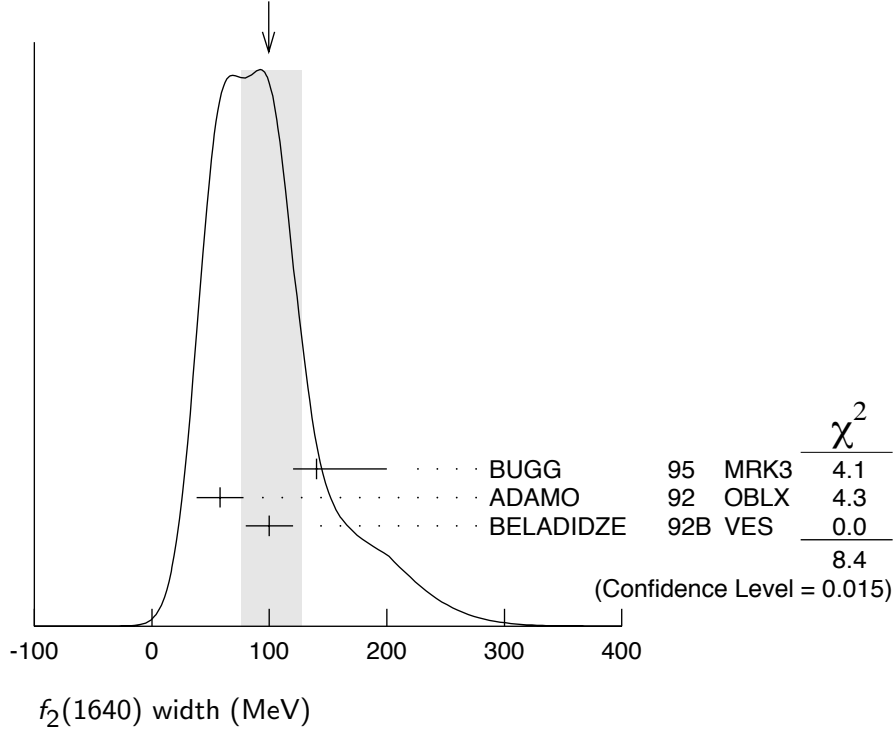
$f_2(1640)$ MASS

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
1638± 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	$\overline{n}p \to 3\pi^+2\pi^-$
1590±30	BELADIDZE	92B	VES	$36\ \pi^- p \to \omega\omega n$
1635± 7	ALDE	90	GAM2	$38\ \pi^- p \to \omega\omega n$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
1643± 7	[1] ALDE	89B	GAM2	$38\ \pi^- p \to \omega\omega n$

[1] Superseded by ALDE 90.

$f_2(1640)$ WIDTH

VALUE (MeV)	CL%	DOCUMENT ID		TECN	COMMENT
99^{+28}_{-24} OUR AVERAGE	Error includes scale factor of 2.1. See the ideogram below.				
140^{+60}_{-20}		BUGG	95	MRK3	$J/\psi \to \gamma \pi^+\pi^-\pi^+\pi^-$
58±20		ADAMO	92	OBLX	$\overline{n}p \to 3\pi^+2\pi^-$
100±20		BELADIDZE	92B	VES	$36\ \pi^- p \to \omega\omega n$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
< 70	90	ALDE	90	GAM2	$38\ \pi^- p \to \omega\omega n$

WEIGHTED AVERAGE
99+28-24 (Error scaled by 2.1)

		χ^2
BUGG	95 MRK3	4.1
ADAMO	92 OBLX	4.3
BELADIDZE	92B VES	0.0
		8.4

(Confidence Level = 0.015)

-100   0   100   200   300   400

$f_2(1640)$ width (MeV)

$f_2(1640)$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	$\omega\omega$	seen
Γ_2	4π	seen

$f_2(1640)$ REFERENCES

BUGG	95	PL B353 378	D.V. Bugg *et al.*	(LOQM, PNPI, WASH) JP
ADAMO	92	PL B287 368	A. Adamo *et al.*	(OBELIX Collab.)
BELADIDZE	92B	ZPHY C54 367	G.M. Beladidze *et al.*	(VES Collab.)
ALDE	90	PL B241 600	D.M. Alde *et al.*	(SERP, BELG, LANL, LAPP+)
ALDE	89B	PL B216 451	D.M. Alde *et al.*	(SERP, BELG, LANL, LAPP+) IGJPC

———— **OTHER RELATED PAPERS** ————

ANISOVICH	05	JETPL 80 715	V.V. Anisovich
		Translated from ZETFP 80 845.	
PROKOSHKIN	99	PAN 62 356	Yu.D. Prokoshkin
		Translated from YAF 62 396.	