

$f_2(1910)$

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

OMITTED FROM SUMMARY TABLE

We list here two different peaks with close masses and widths seen in the mass distributions of $\omega\omega$ and $\eta\eta'$ final states. ALDE 91B argues that they are of different nature.

 $f_2(1910)$ MASS **$f_2(1910)$ $\omega\omega$ MODE**

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
1915 ± 7 OUR AVERAGE	Error includes scale factor of 1.2.		
1934 ± 20	ANISOVICH	00J SPEC	
1897 ± 11	BARBERIS	00F	450 $pp \rightarrow p_f \omega \omega p_s$
1920 ± 10	BELADIDZE	92B VES	36 $\pi^- p \rightarrow \omega \omega n$
1924 ± 14	ALDE	90 GAM2	38 $\pi^- p \rightarrow \omega \omega n$

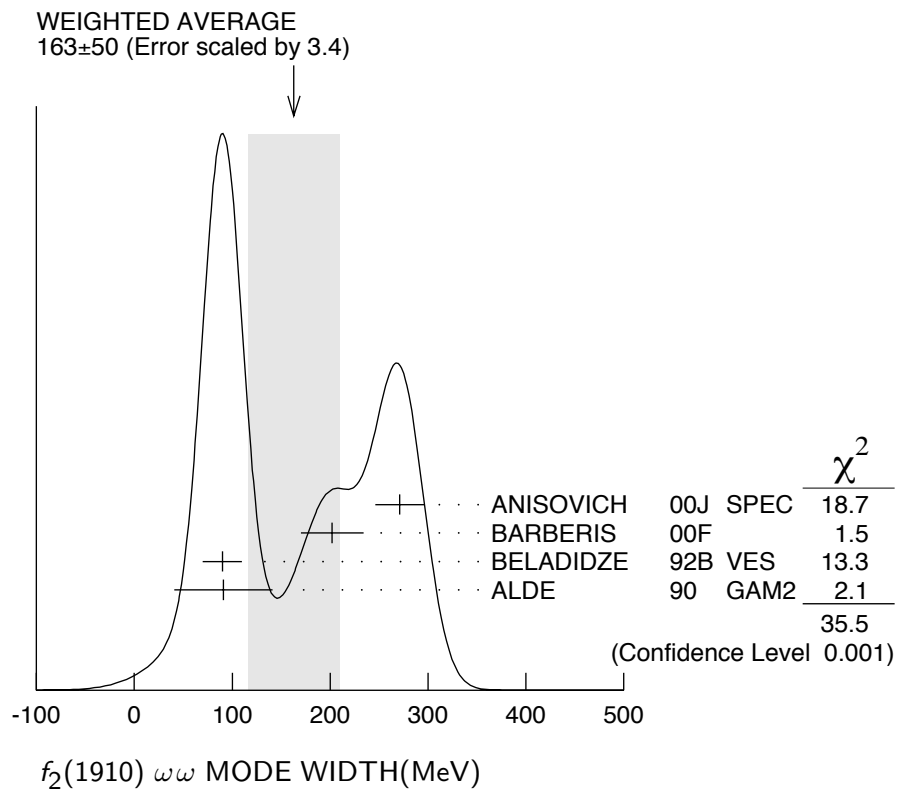
 $f_2(1910)$ $\eta\eta'$ MODE

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
1934 ± 16	¹ BARBERIS	00A	450 $pp \rightarrow p_f \eta \eta' p_s$
• • • We do not use the following data for averages, fits, limits, etc. • • •			
1911 ± 10	ALDE	91B GAM2	38 $\pi^- p \rightarrow \eta \eta' n$

¹ Also compatible with $J^{PC}=1^{-+}$.

 $f_2(1910)$ WIDTH **$f_2(1910)$ $\omega\omega$ MODE**

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
163 ± 50 OUR AVERAGE	Error includes scale factor of 3.4. See the ideogram below.		
271 ± 25	ANISOVICH	00J SPEC	
202 ± 32	BARBERIS	00F	450 $pp \rightarrow p_f \omega \omega p_s$
90 ± 20	BELADIDZE	92B VES	36 $\pi^- p \rightarrow \omega \omega n$
91 ± 50	ALDE	90 GAM2	38 $\pi^- p \rightarrow \omega \omega n$



$f_2(1910) \eta\eta'$ MODE

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
141±41	² BARBERIS	00A	450 $p p \rightarrow p_f \eta \eta' p_s$
• • • We do not use the following data for averages, fits, limits, etc. • • •			
90±35	ALDE	91B	GAM2 38 $\pi^- p \rightarrow \eta \eta' n$
² Also compatible with $J^{PC}=1^-+$.			

$f_2(1910)$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
Γ_1 $\pi^0 \pi^0$	
Γ_2 $K_S^0 K_S^0$	
Γ_3 $\eta\eta$	seen
Γ_4 $\omega\omega$	seen
Γ_5 $\eta\eta'$	seen
Γ_6 $\eta'\eta'$	
Γ_7 $\rho\rho$	seen

$f_2(1910)$ BRANCHING RATIOS

$\Gamma(\pi^0 \pi^0)/\Gamma(\eta\eta')$	DOCUMENT ID	TECN	COMMENT	Γ_1/Γ_5
<0.1	ALDE	89	GAM2 38 $\pi^- p \rightarrow \eta \eta' n$	

$\Gamma(\eta\eta)/\Gamma(\eta\eta')$ Γ_3/Γ_5

VALUE	CL%	DOCUMENT ID	TECN	COMMENT
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• • • We do not use the following data for averages, fits, limits, etc. • • •

<0.05	90	ALDE	91B GAM2	$38 \pi^- p \rightarrow \eta\eta' n$
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 $\Gamma(K_S^0 K_S^0)/\Gamma(\eta\eta')$ Γ_2/Γ_5

VALUE	CL%	DOCUMENT ID	TECN	COMMENT
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• • • We do not use the following data for averages, fits, limits, etc. • • •

<0.066	90	BALOSHIN	86 SPEC	$40 \pi p \rightarrow K_S^0 K_S^0 n$
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 $\Gamma(\eta'\eta')/\Gamma_{\text{total}}$ Γ_6/Γ

VALUE	DOCUMENT ID	TECN	COMMENT
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• • • We do not use the following data for averages, fits, limits, etc. • • •

probably not seen	BARBERIS	00A	$450 pp \rightarrow p_f \eta' \eta' p_S$
possibly seen	BELADIDZE	92D VES	$37 \pi^- p \rightarrow \eta' \eta' n$

 $\Gamma(\rho\rho)/\Gamma(\omega\omega)$ Γ_7/Γ_4

VALUE	DOCUMENT ID	COMMENT
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• • • We do not use the following data for averages, fits, limits, etc. • • •

2.6 ± 0.4	BARBERIS	00F 450 $pp \rightarrow p_f \omega\omega p_S$
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 $\Gamma(\omega\omega)/\Gamma(\eta\eta')$ Γ_4/Γ_5

VALUE	DOCUMENT ID	COMMENT
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• • • We do not use the following data for averages, fits, limits, etc. • • •

2.6 ± 0.6	BARBERIS	00F 450 $pp \rightarrow p_f \omega\omega p_S$
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 $f_2(1910)$ REFERENCES

ANISOVICH	00J	PL B491 47	A.V. Anisovich <i>et al.</i>	
BARBERIS	00A	PL B471 429	D. Barberis <i>et al.</i>	(WA 102 Collab.)
BARBERIS	00F	PL B484 198	D. Barberis <i>et al.</i>	(WA 102 Collab.)
BELADIDZE	92B	ZPHY C54 367	G.M. Beladidze <i>et al.</i>	(VES Collab.)
BELADIDZE	92D	ZPHY C57 13	G.M. Beladidze <i>et al.</i>	(VES Collab.)
ALDE	91B	SJNP 54 455	D.M. Alde <i>et al.</i>	(SERP, BELG, LANL, LAPP+)
	Also	Translated from YAF 54 751.		
		PL B276 375	D.M. Alde <i>et al.</i>	(BELG, SERP, KEK, LANL+)
ALDE	90	PL B241 600	D.M. Alde <i>et al.</i>	(SERP, BELG, LANL, LAPP+)
ALDE	89	PL B216 447	D.M. Alde <i>et al.</i>	(SERP, BELG, LANL, LAPP)
	Also	SJNP 48 1035	D.M. Alde <i>et al.</i>	(BELG, SERP, LANL, LAPP)
		Translated from YAF 48 1724.		
BALOSHIN	86	SJNP 43 959	O.N. Baloshin <i>et al.</i>	(ITEP)
		Translated from YAF 43 1487.		

OTHER RELATED PAPERS

ANISOVICH	05	JETPL 80 715	V.V. Anisovich	
		Translated from ZETFP 80 845.		
ANISOVICH	05A	JETPL 81 417	V.V. Anisovich, A.V. Sarantsev	
		Translated from ZETFP 81 531.		
ANISOVICH	05C	IJMP A20 6327	V.V. Anisovich, M.A. Matveev, A.V. Sarantsev	
LEE	94	PL B323 227	J.H. Lee <i>et al.</i>	(BNL, IND, KYUN, MASD+)