

# $f_2(1910)$

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

## 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>
<b>1915 ± 7 OUR AVERAGE</b>	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

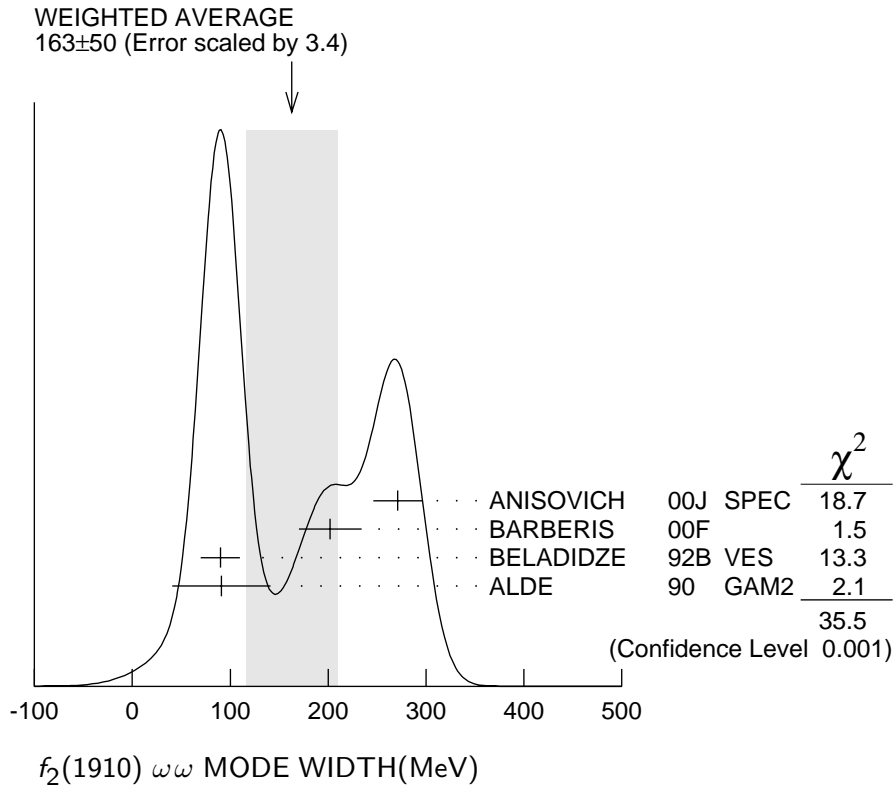
<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>1934 ± 16</b>	<sup>1</sup> BARBERIS	00A	450 $pp \rightarrow p_f \eta \eta' p_S$
• • • We do not use the following data for averages, fits, limits, etc. • • •			
1911 ± 10	ALDE	91B GAM2	38 $\pi^- p \rightarrow \eta \eta' n$

<sup>1</sup> 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>
<b>163 ± 50 OUR AVERAGE</b>	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
<b>141±41</b>	<sup>2</sup> 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 $\pi^- p \rightarrow \eta \eta' n$
<sup>2</sup> Also compatible with $J^{PC}=1^-+$ .			

### $f_2(1910)$ DECAY MODES

Mode	Fraction ( $\Gamma_i/\Gamma$ )
$\Gamma_1$ $\pi^0 \pi^0$	
$\Gamma_2$ $K_S^0 K_S^0$	
$\Gamma_3$ $\eta\eta$	seen
$\Gamma_4$ $\omega\omega$	seen
$\Gamma_5$ $\eta\eta'$	seen
$\Gamma_6$ $\eta'\eta'$	
$\Gamma_7$ $\rho\rho$	seen

### $f_2(1910)$ BRANCHING RATIOS

$\Gamma(\pi^0 \pi^0)/\Gamma(\eta\eta')$	DOCUMENT ID	TECN	COMMENT	$\Gamma_1/\Gamma_5$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<0.1	ALDE	89	GAM2 38 $\pi^- p \rightarrow \eta \eta' n$	

$\Gamma(\eta\eta)/\Gamma(\eta\eta')$   $\Gamma_3/\Gamma_5$

VALUE CL% DOCUMENT ID TECN COMMENT

• • • We do not use the following data for averages, fits, limits, etc. • • •

<0.05                      90                      ALDE                      91B GAM2 38  $\pi^- p \rightarrow \eta\eta' n$

$\Gamma(K_S^0 K_S^0)/\Gamma(\eta\eta')$   $\Gamma_2/\Gamma_5$

VALUE CL% DOCUMENT ID TECN COMMENT

• • • We do not use the following data for averages, fits, limits, etc. • • •

<0.066                      90                      BALOSHIN                      86 SPEC 40  $\pi p \rightarrow K_S^0 K_S^0 n$

$\Gamma(\eta'\eta')/\Gamma_{\text{total}}$   $\Gamma_6/\Gamma$

VALUE DOCUMENT ID TECN COMMENT

• • • 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  $\pi^- p \rightarrow \eta' \eta' n$

$\Gamma(\rho\rho)/\Gamma(\omega\omega)$   $\Gamma_7/\Gamma_4$

VALUE DOCUMENT ID COMMENT

• • • We do not use the following data for averages, fits, limits, etc. • • •

$2.6 \pm 0.4$                       BARBERIS                      00F 450  $pp \rightarrow p_f \omega\omega p_S$

$\Gamma(\omega\omega)/\Gamma(\eta\eta')$   $\Gamma_4/\Gamma_5$

VALUE DOCUMENT ID COMMENT

• • • We do not use the following data for averages, fits, limits, etc. • • •

$2.6 \pm 0.6$                       BARBERIS                      00F 450  $pp \rightarrow p_f \omega\omega p_S$

**$f_2(1910)$  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+)
		Translated from YAF 54 751.		
Also	92	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	88E	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**

LEE	94	PL B323 227	J.H. Lee <i>et al.</i>	(BNL, IND, KYUN, MASD+)
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