

# $f_2(1910)$

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

## OMITTED FROM SUMMARY TABLE

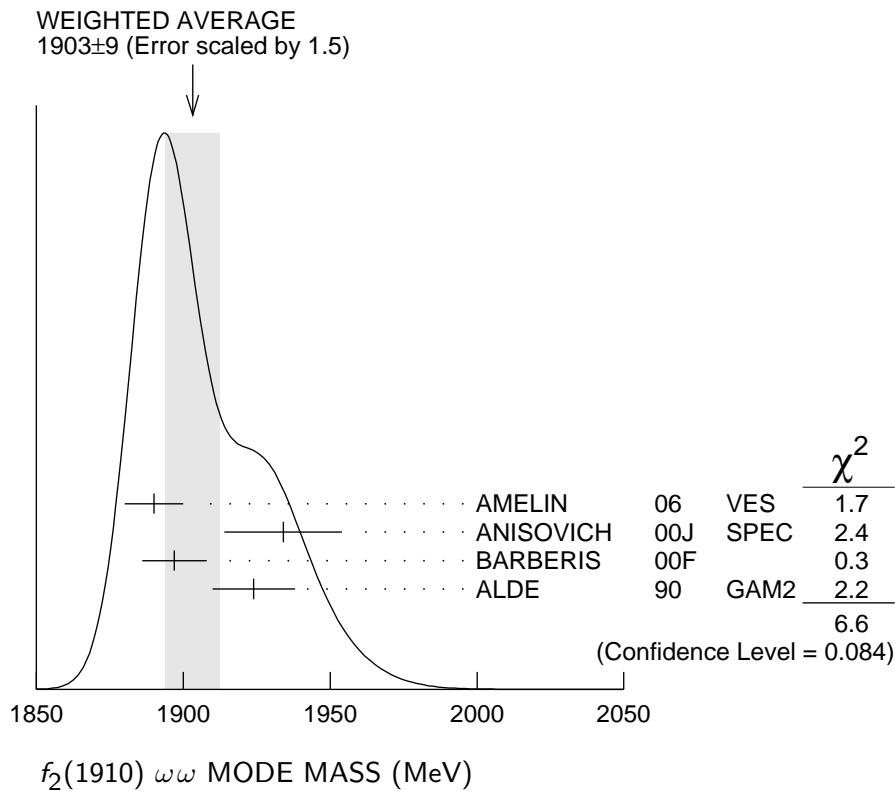
We list here three different peaks with close masses and widths seen in the mass distributions of  $\omega\omega$ ,  $\eta\eta'$ , and  $K^+K^-$  final states. ALDE 91B argues that they are of different nature.

## $f_2(1910)$ MASS

### $f_2(1910)$ $\omega\omega$ MODE

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
<b>1903 ± 9 OUR AVERAGE</b>	Error includes scale factor of 1.5. See the ideogram below.		
1890 ± 10	<sup>1</sup> AMELIN	06	VES 36 $\pi^- p \rightarrow \omega\omega n$
1934 ± 20	ANISOVICH	00J	SPEC
1897 ± 11	BARBERIS	00F	450 $pp \rightarrow p_f\omega\omega p_S$
1924 ± 14	ALDE	90	GAM2 38 $\pi^- p \rightarrow \omega\omega n$

<sup>1</sup>Supersedes BELADIDZE 92B.



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

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
<b>1934±16</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. • • •			
1911±10	ALDE	91B	GAM2 38 $\pi^- p \rightarrow \eta \eta' n$
<sup>2</sup> Also compatible with $J^{PC}=1^-+$ .			

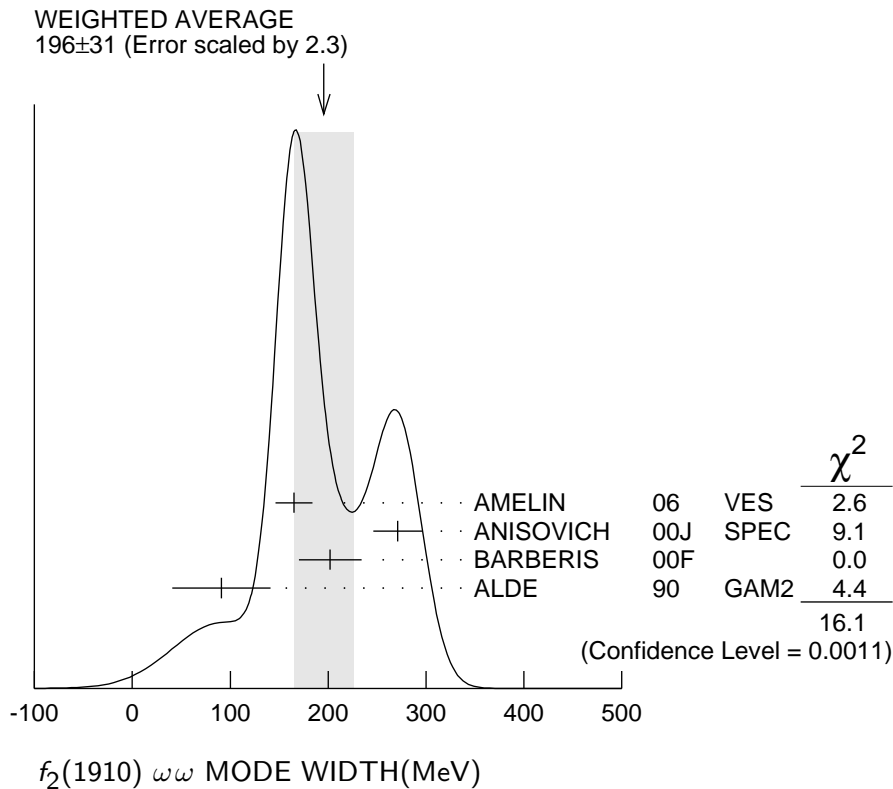
### $f_2(1910) K^+ K^-$ MODE

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
1941±18	AMSLER	06	CBAR 1.64 $\bar{p} p \rightarrow K^+ K^- \pi^0$

### $f_2(1910)$ WIDTH

#### $f_2(1910) \omega\omega$ MODE

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
<b>196±31 OUR AVERAGE</b>	Error includes scale factor of 2.3. See the ideogram below.		
165±19	<sup>3</sup> AMELIN	06	VES 36 $\pi^- p \rightarrow \omega\omega n$
271±25	ANISOVICH	00J	SPEC
202±32	BARBERIS	00F	450 $p p \rightarrow p_f \omega\omega p_s$
91±50	ALDE	90	GAM2 38 $\pi^- p \rightarrow \omega\omega n$
<sup>3</sup> Supersedes BELADIDZE 92B.			



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

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
<b>141±41</b>	<sup>4</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>4</sup> Also compatible with $J^{PC}=1^-+$ .			

## $f_2(1910) K^+ K^-$ MODE

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
120±40	AMSLER	06	CBAR 1.64 $\bar{p} p \rightarrow K^+ K^- \pi^0$

## $f_2(1910)$ DECAY MODES

Mode	Fraction ( $\Gamma_i/\Gamma$ )
$\Gamma_1 \pi^0 \pi^0$	
$\Gamma_2 K^+ K^-$	seen
$\Gamma_3 K_S^0 K_S^0$	
$\Gamma_4 \eta\eta$	seen
$\Gamma_5 \omega\omega$	seen
$\Gamma_6 \eta\eta'$	seen
$\Gamma_7 \eta'\eta'$	
$\Gamma_8 \rho\rho$	seen
$\Gamma_9 a_2(1320)\pi$	seen
$\Gamma_{10} f_2(1270)\eta$	seen

## $f_2(1910)$ BRANCHING RATIOS

$\Gamma(K^+ K^-)/\Gamma_{\text{total}}$	$\Gamma_2/\Gamma$		
VALUE	DOCUMENT ID	TECN	COMMENT
seen	AMSLER	06	CBAR 1.64 $\bar{p} p \rightarrow K^+ K^- \pi^0$

$\Gamma(\pi^0 \pi^0)/\Gamma(\eta\eta')$	$\Gamma_1/\Gamma_6$		
VALUE	DOCUMENT ID	TECN	COMMENT

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

<0.1	ALDE	89	GAM2 38 $\pi^- p \rightarrow \eta\eta' n$
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$\Gamma(K_S^0 K_S^0)/\Gamma(\eta\eta')$	$\Gamma_3/\Gamma_6$			
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 $\pi p \rightarrow K_S^0 K_S^0 n$
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$\Gamma(\eta\eta)/\Gamma(\eta\eta')$	$\Gamma_4/\Gamma_6$			
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 $\pi^- p \rightarrow \eta\eta' n$
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$\Gamma(\omega\omega)/\Gamma(\eta\eta')$

$\Gamma_5/\Gamma_6$

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>COMMENT</u>
• • • We do not use the following data for averages, fits, limits, etc. • • •		
$2.6 \pm 0.6$	BARBERIS 00F	450 $pp \rightarrow p_f \omega \omega p_S$

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

$\Gamma_7/\Gamma$

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
• • • 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 $\pi^- p \rightarrow \eta' \eta' n$

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

$\Gamma_8/\Gamma_5$

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>COMMENT</u>
• • • We do not use the following data for averages, fits, limits, etc. • • •		
$2.6 \pm 0.4$	BARBERIS 00F	450 $pp \rightarrow p_f \omega \omega p_S$

$\Gamma(f_2(1270)\eta)/\Gamma(a_2(1320)\pi)$

$\Gamma_{10}/\Gamma_9$

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
<b>0.09 ± 0.05</b>	<sup>5</sup> ANISOVICH 11	SPEC	0.9–1.94 $p\bar{p}$

<sup>5</sup> Reanalysis of ADOMEIT 96 and ANISOVICH 00E.

**$f_2(1910)$  REFERENCES**

ANISOVICH 11	EPJ C71 1511	A.V. Anisovich <i>et al.</i>	(LOQM, RAL, PNPI)
AMELIN 06	PAN 69 690	D.V. Amelin <i>et al.</i>	(VES Collab.)
	Translated from YAF 69 715.		
AMSLER 06	PL B639 165	C. Amsler <i>et al.</i>	(CBAR Collab.)
ANISOVICH 00E	PL B477 19	A.V. Anisovich <i>et al.</i>	
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.)
ADOMEIT 96	ZPHY C71 227	J. Adomeit <i>et al.</i>	(Crystal Barrel 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	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.		