

$f_2(1910)$

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

OMITTED FROM SUMMARY TABLE

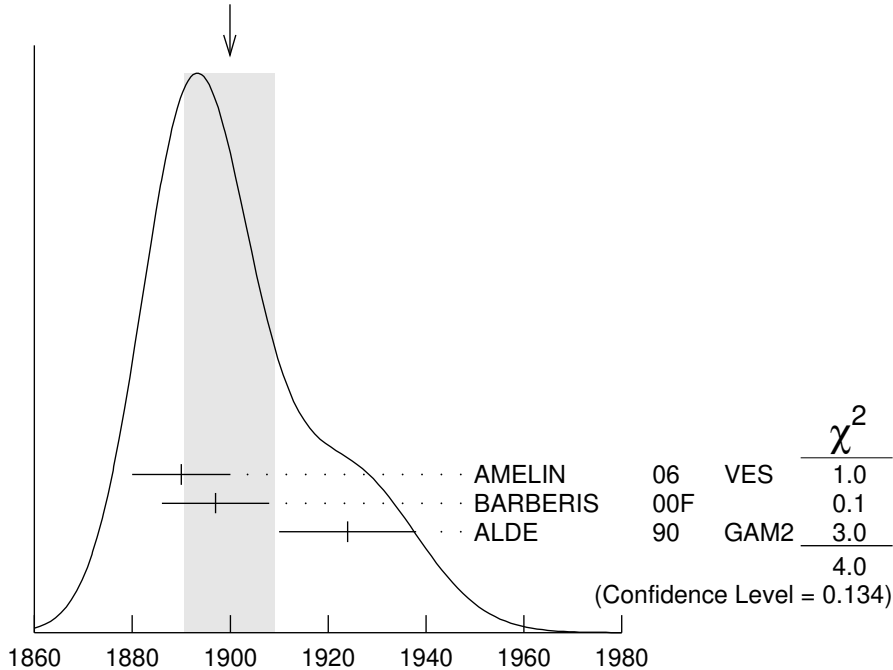
We list here three different peaks with close masses and widths seen in the mass distributions of $\omega\omega$, $\eta\eta'$, and K^+K^- final states. ALDE 91B argues that they are of different nature.

$f_2(1910)$ MASS

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

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
1900 ± 9 OUR AVERAGE	Error includes scale factor of 1.4. See the ideogram below.		
1890 ± 10	¹ AMELIN 06	VES	36 $\pi^- p \rightarrow \omega\omega n$
1897 ± 11	BARBERIS 00F		450 $pp \rightarrow p_f\omega\omega p_s$
1924 ± 14	ALDE 90	GAM2	38 $\pi^- p \rightarrow \omega\omega n$

WEIGHTED AVERAGE
1900 ± 9 (Error scaled by 1.4)



¹ Supersedes BELADIDZE 92B.
 $f_2(1910)$ $\omega\omega$ MODE MASS (MeV)

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

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
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. • • •			
1934 ± 20	² ANISOVICH 00J	SPEC	
1911 ± 10	ALDE 91B	GAM2	38 $\pi^- p \rightarrow \eta\eta' n$

¹ Also compatible with $J^{PC}=1^-+$.
² Combined fit with $\eta\eta$, $\pi\pi$, and $\eta\pi\pi$.

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

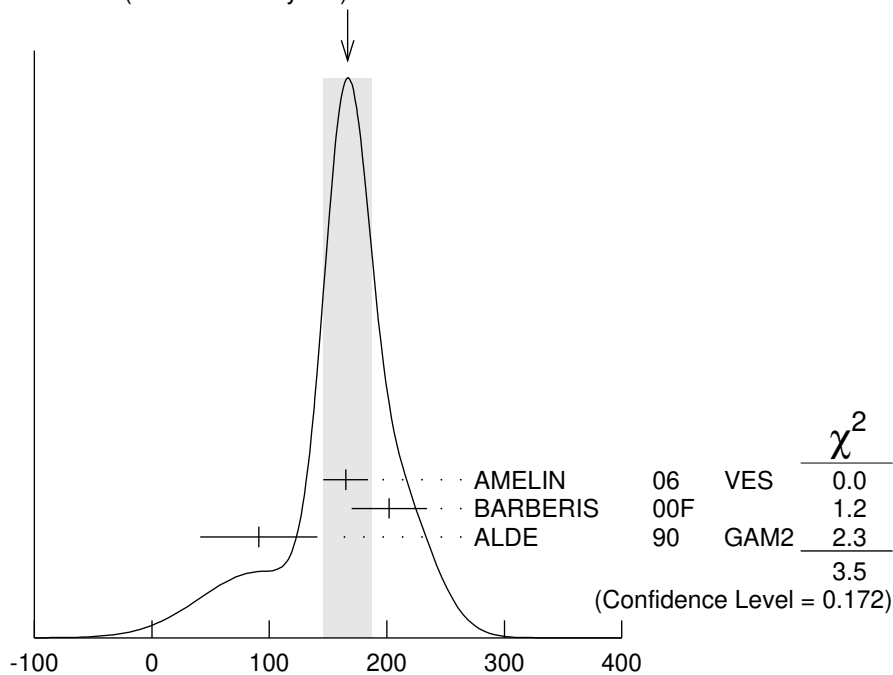
VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
1941 ± 18	¹ AMSLER 06	CBAR	$1.64 \bar{p} p \rightarrow K^+ K^- \pi^0$
¹ Tentative, could be $f_2(1950)$.			

$f_2(1910)$ WIDTH

$f_2(1910) \omega\omega$ MODE

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
167 ± 21 OUR AVERAGE	Error includes scale factor of 1.3. See the ideogram below.		
165 ± 19	¹ AMELIN 06	VES	$36 \pi^- p \rightarrow \omega\omega n$
202 ± 32	BARBERIS 00F		$450 p p \rightarrow p_f \omega\omega p_s$
91 ± 50	ALDE 90	GAM2	$38 \pi^- p \rightarrow \omega\omega n$

WEIGHTED AVERAGE
 167 ± 21 (Error scaled by 1.3)



¹ Supersedes BELADIDZE 92B.
 $f_2(1910) \omega\omega$ mode width (MeV)

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

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
141 ± 41	¹ BARBERIS 00A		$450 p p \rightarrow p_f \eta\eta' p_s$
• • • We do not use the following data for averages, fits, limits, etc. • • •			
271 ± 25	² ANISOVICH 00J	SPEC	
90 ± 35	ALDE 91B	GAM2	$38 \pi^- p \rightarrow \eta\eta' n$

¹ Also compatible with $J^{PC}=1^-+$.
² Combined fit with $\eta\eta, \pi\pi,$ and $\eta\pi\pi$.

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

<u>VALUE (MeV)</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
120 ± 40	AMSLER	06	CBAR 1.64 $\bar{p}p \rightarrow K^+ K^- \pi^0$

 $f_2(1910)$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \pi^0 \pi^0$	
$\Gamma_2 K^+ K^-$	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

$\Gamma(K^+ K^-)/\Gamma_{\text{total}}$	Γ_2/Γ
<u>VALUE</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>
seen	¹ AMSLER 06 CBAR 1.64 $\bar{p}p \rightarrow K^+ K^- \pi^0$

¹ Tentative, could be $f_2(1950)$.

$\Gamma(\pi^0 \pi^0)/\Gamma(\eta \eta')$	Γ_1/Γ_6
<u>VALUE</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>
<0.1	ALDE 89 GAM2 38 $\pi^- p \rightarrow \eta \eta' n$

$\Gamma(K_S^0 K_S^0)/\Gamma(\eta \eta')$	Γ_3/Γ_6
<u>VALUE</u> <u>CL%</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>
<0.066 90	BALOSHIN 86 SPEC 40 $\pi p \rightarrow K_S^0 K_S^0 n$

$\Gamma(\eta \eta)/\Gamma(\eta \eta')$	Γ_4/Γ_6
<u>VALUE</u> <u>CL%</u>	<u>DOCUMENT ID</u> <u>TECN</u> <u>COMMENT</u>
<0.05 90	ALDE 91B GAM2 38 $\pi^- p \rightarrow \eta \eta' n$

$\Gamma(\omega \omega)/\Gamma(\eta \eta')$	Γ_5/Γ_6
<u>VALUE</u>	<u>DOCUMENT ID</u> <u>COMMENT</u>
2.6 ± 0.6	BARBERIS 00F 450 $pp \rightarrow p_f \omega \omega p_s$

$\Gamma(\eta'\eta')/\Gamma_{\text{total}}$ Γ_7/Γ

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

$\Gamma(\rho\rho)/\Gamma(\omega\omega)$ Γ_8/Γ_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 ± 0.4	BARBERIS 00F	450 $pp \rightarrow p_f \omega \omega p_s$

$\Gamma(f_2(1270)\eta)/\Gamma(a_2(1320)\pi)$ Γ_{10}/Γ_9

<u>VALUE</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
0.09 ± 0.05	¹ ANISOVICH 11	SPEC	0.9–1.94 $p\bar{p}$

¹ 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>	(Crystal Barrel 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>	(RAL, LOQM, PNPI+)
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.		