

$f_2(1910)$

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

OMITTED FROM SUMMARY TABLE

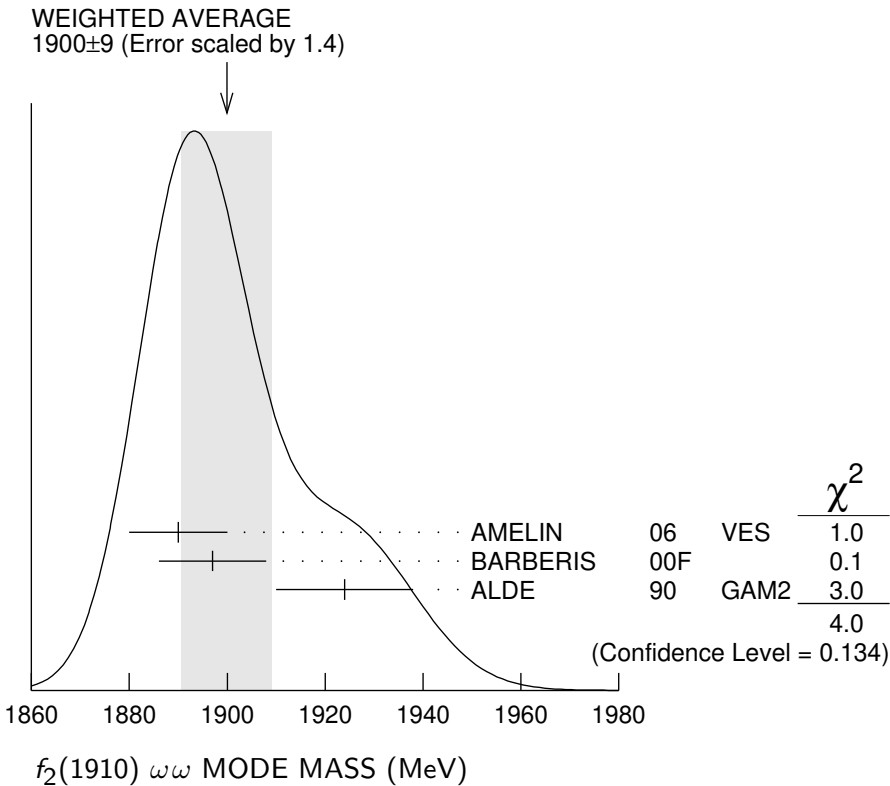
We list here three different peaks with close masses and widths seen in the mass distributions of $\omega\omega$, $\eta\eta'$, and K^+K^- final states. ALDE 91B argues that they are of different nature.

$f_2(1910)$ 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 $\pi^-p \rightarrow \omega\omega n$

¹Supersedes BELADIDZE 92B.



$f_2(1910)$ $\eta\eta'$ 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 $\eta\pi\pi$.

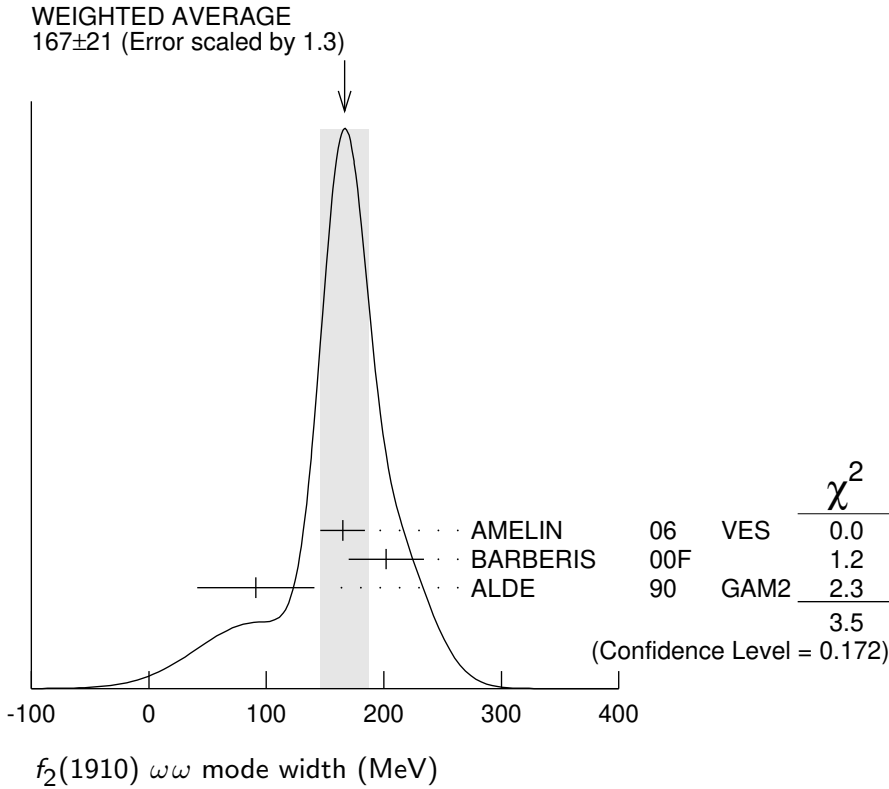
$f_2(1910) K^+ K^-$ MODE

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •			
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 $38 \pi^- p \rightarrow \omega\omega n$
¹ Supersedes BELADIDZE 92B.			



$f_2(1910) \eta \eta'$ 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

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

$\Gamma(K_S^0 K_S^0)/\Gamma(\eta\eta')$					Γ_3/Γ_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	$40\pi p \rightarrow K_S^0 K_S^0 n$

$\Gamma(\eta\eta)/\Gamma(\eta\eta')$					Γ_4/Γ_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	$\pi^- p \rightarrow \eta\eta' n$
$\Gamma(\omega\omega)/\Gamma(\eta\eta')$					Γ_5/Γ_6	
VALUE		DOCUMENT ID		COMMENT		
• • • We do not use the following data for averages, fits, limits, etc. • • •						
2.6 ± 0.6		BARBERIS	00F	450	$pp \rightarrow p_f \omega \omega p_s$	
$\Gamma(\eta'\eta')/\Gamma_{\text{total}}$					Γ_7/Γ	
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	$\pi^- p \rightarrow \eta' \eta' n$
$\Gamma(\rho\rho)/\Gamma(\omega\omega)$					Γ_8/Γ_5	
VALUE		DOCUMENT ID		COMMENT		
• • • 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	
VALUE		DOCUMENT ID	TECN	COMMENT		
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.		