Meson Full Listings

$\eta_2(1870), X(1910)$

$\eta_2(1870)$

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

OMITTED FROM SUMMARY TABLE

Needs confirmation.

$\eta_2(1870)$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	COMMENT
1881 ± 32 ± 40	26	KARCH	92	CBAL	$e^+e^- \to e^+e^-\eta\pi^0\pi^0$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
1850 ± 50		FEINDT	91	CELL	$\gamma\gamma \to \eta\pi^+\pi^-$

$\eta_2(1870)$ WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	COMMENT
221 ± 92 ± 44	26	KARCH	92	CBAL	$e^+e^- \to e^+e^-\eta\pi^0\pi^0$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
~ 360		FEINDT	91	CELL	$\gamma\gamma \to \eta\pi^+\pi^-$

$\eta_2(1870)$ DECAY MODES

	Mode
Γ_1	$\eta\pi\pi$
Γ_2	$a_2(1320)\pi$
Γ_3	$f_0(980)\eta$

$\eta_2(1870)$ REFERENCES

KARCH 92 ZPHY C54 33 +Antreasyan, Bartels+ (Crystal Ball Collab.)
FEINDT 91 Singapore Conf. 537

OTHER RELATED PAPERS

KARCH 90 PL B249 353 +Antreasyan, Bartels+ (Crystal Ball Collab.)

$X(1910)$

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

OMITTED FROM SUMMARY TABLE

We list here several bumps seen in the mass distributions of different final states.

$X(1910)$ MASS

VALUE (MeV)	DOCUMENT ID
1810 to 1920 OUR ESTIMATE	

$X(1910)$ $4\pi^0$ MODE

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •					
1806 ± 10	1600 ± 100	ALDE	87	GAM4	100 $\pi^- p \to 4\pi^0 n$
1870 ± 40		ALDE	86D	GAM4	100 $\pi^- p \to 4\gamma n$

$X(1910)$ $\omega\omega$ MODE

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
1920 ± 10	BELADIDZE	92B	VES	36 $\pi^- p \to \omega\omega n$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
1924 ± 14	ALDE	90	GAM2	38 $\pi^- p \to n\omega\omega$

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

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •				
1911 ± 10	ALDE	91B	GAM2	38 $\pi^- p \to \eta\eta' n$

$X(1910)$ WIDTH

VALUE (MeV)	DOCUMENT ID
90 to 250 OUR ESTIMATE	

$X(1910)$ $4\pi^0$ MODE

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •					
190 ± 20	1600 ± 100	ALDE	87	GAM4	100 $\pi^- p \to 4\pi^0 n$
250 ± 30		ALDE	86D	GAM4	100 $\pi^- p \to 4\gamma n$

$X(1910)$ $\omega\omega$ MODE

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
90 ± 20	BELADIDZE	92B	VES	36 $\pi^- p \to \omega\omega n$
• • • We do not use the following data for averages, fits, limits, etc. • • •				
91 ± 50	ALDE	90	GAM2	38 $\pi^- p \to n\omega\omega$

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

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •				
90 ± 35	ALDE	91B	GAM2	38 $\pi^- p \to \eta\eta' n$

$X(1910)$ DECAY MODES

	Mode
Γ_1	$4\pi^0$
Γ_2	$\pi\pi$
Γ_3	$\pi^0\pi^0$
Γ_4	$K^0_S K^0_S$
Γ_5	$\eta\eta$
Γ_6	$\omega\omega$
Γ_7	$\eta\eta'$
Γ_8	$\eta\pi\pi$
Γ_9	$\eta'\eta'$

$X(1910)$ BRANCHING RATIOS

$\Gamma(\pi^0\pi^0)/\Gamma(4\pi^0)$ — **Γ_3/Γ_1**

VALUE	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •				
< 0.25	ALDE	87	GAM4	100 $\pi^- p \to 4\pi^0 n$

$\Gamma(4\pi^0)/\Gamma(\eta\eta)$ — **Γ_1/Γ_5**

VALUE	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •				
0.8 ± 0.3	ALDE	87	GAM4	100 $\pi^- p \to 4\pi^0 n$

$\Gamma(\omega\omega)/\Gamma_{total}$ — **Γ_6/Γ**

VALUE	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •				
seen	ALDE	89B	GAM2	38 $\pi^- p \to n\omega\omega$

$\Gamma(\pi^0\pi^0)/\Gamma(\eta\eta')$ — **Γ_3/Γ_7**

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

$\Gamma(\eta\eta)/\Gamma(\eta\eta')$ — **Γ_5/Γ_7**

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 $\pi^- p \to n\eta\eta'$

$\Gamma(K^0_S K^0_S)/\Gamma(\eta\eta')$ — **Γ_4/Γ_7**

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 $\pi p \to K^0_S K^0_S n$

$\Gamma(\eta'\eta')/\Gamma_{total}$ — **Γ_9/Γ**

VALUE	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •				
possibly seen	BELADIDZE	92D	VES	37 $\pi^- p \to \eta'\eta' n$

$X(1910)$ REFERENCES

BELADIDZE 92B ZPHY C54 367 +Bityukov, Borisov+ (VES Collab.)
BELADIDZE 92D ZPHY C57 13 +Berdnikov+ (VES Collab.)
ALDE 91B SJNP 54 455 +Binon+ (SERP, BELG, LANL, LAPP, PISA, KEK)
Translated from YAF 54 751.
ALDE 90 PL B241 600 +Binon+ (SERP, BELG, LANL, LAPP, PISA, KEK)
ALDE 89 PL B216 447 +Binon, Bricman, Donskov+ (SERP, BELG, LANL, LAPP)
ALDE 89B PL B216 451 +Binon, Bricman+ (SERP, BELG, LANL, LAPP, TBIL)
ALDE 87 PL B198 286 +Binon, Bricman+ (LANL, BRUX, SERP, LAPP)
ALDE 86D NP B269 485 +Binon, Bricman+ (BELG, LAPP, SERP, CERN)
BALOSHIN 86 SJNP 43 959 +Barkov, Bolonkin, Vladimirskii, Grigoriev+ (ITEP)
Translated from YAF 43 1487.