

$f_0(2200)$

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

OMITTED FROM SUMMARY TABLE

Seen in $K_S^0 K_S^0$ (AUGUSTIN 88), $K^+ K^-$ (ABLIKIM 05Q) and $\eta\eta$ (BINON 05) system. Not seen in $\Upsilon(1S)$ radiative decays (BARU 89).

 $f_0(2200)$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
2187 ± 14 OUR AVERAGE				
2170 ± 20 ⁺¹⁰ ₋₁₅		ABLIKIM	05Q	BES2 $\psi(2S) \rightarrow \gamma \pi^+ \pi^- K^+ K^-$
2197 ± 17		¹ AUGUSTIN	88	DM2 $J/\psi \rightarrow \gamma K_S^0 K_S^0$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
2200 ± 25		SARANTSEV	21	RVUE $J/\psi(1S) \rightarrow \gamma (\pi\pi, K\bar{K}, \eta\eta, \omega\phi)$
2206 ± 12 ± 8	381	^{2,3} DOBBS	15	$J/\psi \rightarrow \gamma K^+ K^-$
2188 ± 17 ± 16	203	^{2,3} DOBBS	15	$\psi(2S) \rightarrow \gamma K^+ K^-$
2210 ± 50		⁴ BINON	05	GAMS $33 \pi^- p \rightarrow \eta\eta n$
~ 2122		HASAN	94	RVUE $\bar{p} p \rightarrow \pi\pi$
~ 2321		HASAN	94	RVUE $\bar{p} p \rightarrow \pi\pi$

¹ Cannot determine spin to be 0.² Using CLEO-c data but not authored by the CLEO Collaboration.³ From a fit to a Breit-Wigner line shape with fixed $\Gamma = 238$ MeV.⁴ First solution, PWA is ambiguous. **$f_0(2200)$ WIDTH**

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
207 ± 40 OUR AVERAGE			
220 ± 60 ⁺⁴⁰ ₋₄₅	ABLIKIM	05Q	BES2 $\psi(2S) \rightarrow \gamma \pi^+ \pi^- K^+ K^-$
201 ± 51	⁵ AUGUSTIN	88	DM2 $J/\psi \rightarrow \gamma K_S^0 K_S^0$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●			
150 ± 30	SARANTSEV	21	RVUE $J/\psi(1S) \rightarrow \gamma (\pi\pi, K\bar{K}, \eta\eta, \omega\phi)$
380 ± 90	⁶ BINON	05	GAMS $33 \pi^- p \rightarrow \eta\eta n$
~ 273	HASAN	94	RVUE $\bar{p} p \rightarrow \pi\pi$
~ 223	HASAN	94	RVUE $\bar{p} p \rightarrow \pi\pi$

⁵ Cannot determine spin to be 0.⁶ First solution, PWA is ambiguous. **$f_0(2200)$ REFERENCES**

SARANTSEV	21	PL B816 136227	A.V. Sarantsev <i>et al.</i>	(BONN, PNPI)
DOBBS	15	PR D91 052006	S. Dobbs <i>et al.</i>	(NWES)
ABLIKIM	05Q	PR D72 092002	M. Ablikim <i>et al.</i>	(BES Collab.)
BINON	05	PAN 68 960	F. Binon <i>et al.</i>	
		Translated from YAF 68 998.		

HASAN	94	PL B334 215	A. Hasan, D.V. Bugg	(LOQM)
BARU	89	ZPHY C42 505	S.E. Baru <i>et al.</i>	(NOVO)
AUGUSTIN	88	PRL 60 2238	J.E. Augustin <i>et al.</i>	(DM2 Collab.)
