

$f_0(2200)$

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

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
2189 ± 13 OUR AVERAGE				
2170 ± 20 ⁺¹⁰ ₋₁₅		ABLIKIM	05Q	BES2 $\psi(2S) \rightarrow \gamma\pi^+\pi^-K^+K^-$
2210 ± 50		¹ BINON	05	GAMS 33 $\pi^-p \rightarrow \eta\eta n$
2197 ± 17		² 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. ● ● ●				
2206 ± 12 ± 8	381	^{3,4} DOBBS	15	$J/\psi \rightarrow \gamma K^+ K^-$
2188 ± 17 ± 16	203	^{3,4} DOBBS	15	$\psi(2S) \rightarrow \gamma K^+ K^-$
~ 2122		HASAN	94	RVUE $\bar{p}p \rightarrow \pi\pi$
~ 2321		HASAN	94	RVUE $\bar{p}p \rightarrow \pi\pi$

¹ First solution, PWA is ambiguous.² Cannot determine spin to be 0.³ Using CLEO-c data but not authored by the CLEO Collaboration.⁴ From a fit to a Breit-Wigner line shape with fixed $\Gamma = 238$ MeV. **$f_0(2200)$ WIDTH**

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
238 ± 50 OUR AVERAGE Error includes scale factor of 1.2.			
220 ± 60 ⁺⁴⁰ ₋₄₅	ABLIKIM	05Q	BES2 $\psi(2S) \rightarrow \gamma\pi^+\pi^-K^+K^-$
380 ± 90	⁵ BINON	05	GAMS 33 $\pi^-p \rightarrow \eta\eta n$
201 ± 51	⁶ 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. ● ● ●			
~ 273	HASAN	94	RVUE $\bar{p}p \rightarrow \pi\pi$
~ 223	HASAN	94	RVUE $\bar{p}p \rightarrow \pi\pi$

⁵ First solution, PWA is ambiguous.⁶ Cannot determine spin to be 0. **$f_0(2200)$ REFERENCES**

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.)