

**$f_0(2200)$** 

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

## 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
<b>2187 ± 14 OUR AVERAGE</b>				
2170 ± 20 <sup>+10</sup> <sub>-15</sub>		ABLIKIM	05Q	BES2 $\psi(2S) \rightarrow \gamma \pi^+ \pi^- K^+ K^-$
2197 ± 17		<sup>1</sup> 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	<sup>2,3</sup> DOBBS	15	$J/\psi \rightarrow \gamma K^+ K^-$
2188 ± 17 ± 16	203	<sup>2,3</sup> DOBBS	15	$\psi(2S) \rightarrow \gamma K^+ K^-$
2210 ± 50		<sup>4</sup> BINON	05	GAMS $33 \pi^- p \rightarrow \eta\eta n$
~ 2122		HASAN	94	RVUE $\bar{p}p \rightarrow \pi\pi$
~ 2321		HASAN	94	RVUE $\bar{p}p \rightarrow \pi\pi$

<sup>1</sup> Cannot determine spin to be 0.<sup>2</sup> Using CLEO-c data but not authored by the CLEO Collaboration.<sup>3</sup> From a fit to a Breit-Wigner line shape with fixed  $\Gamma = 238$  MeV.<sup>4</sup> First solution, PWA is ambiguous. **$f_0(2200)$  WIDTH**

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
<b>207 ± 40 OUR AVERAGE</b>			
220 ± 60 <sup>+40</sup> <sub>-45</sub>	ABLIKIM	05Q	BES2 $\psi(2S) \rightarrow \gamma \pi^+ \pi^- K^+ K^-$
201 ± 51	<sup>5</sup> 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	<sup>6</sup> BINON	05	GAMS $33 \pi^- p \rightarrow \eta\eta n$
~ 273	HASAN	94	RVUE $\bar{p}p \rightarrow \pi\pi$
~ 223	HASAN	94	RVUE $\bar{p}p \rightarrow \pi\pi$

<sup>5</sup> Cannot determine spin to be 0.<sup>6</sup> 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.)

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