NODE=M169

$f_0(2330)$

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

OMITTED FROM SUMMARY TABLE

$f_0(2330)$ MASS

NODE=M169M

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •				
$2312 \pm 7^{+7}_{-3}$	[1] ABLIKIM	22AS	BES3	$J/\psi(1S) \to \gamma\eta\eta'$
$2312 \pm 2^{+10}_{-0}$	[2] ABLIKIM	22C	BES3	$J/\psi \to \gamma\eta'\eta' \to 4/5\gamma 2(\pi^+\pi^-)$
2419 ± 64	[3] RODAS	22	RVUE	$J/\psi(1S) \to \gamma\ (\pi\pi,\ K\overline{K})$
2340 ± 20	SARANTSEV	21	RVUE	$J/\psi(1S) \to \gamma\ (\pi\pi,\ K\overline{K},\ \eta\eta,\ \omega\phi)$
2314 ± 25	[4] BUGG	04A	RVUE	
2337 ± 14	ANISOVICH	00J	SPEC	$2.0\ \overline{p}p \to \pi\pi,\ \eta\eta$
~ 2321	HASAN	94	RVUE	$\overline{p}p \to \pi\pi$

[1] From a Breit-Wigner fit involving 9 resonances and a resonating exotic $\eta_1(1855) \to \eta\eta'$ P-wave. NODE=M169M;LINKAGE=C

[2] From a partial wave analysis of the systems (γX), with $X \to \eta'\eta'$, and $(\eta' X)$, with $X \to \gamma\eta'$ in the decay $J/\psi \to \gamma\eta'\eta'$. The intermediate resonance X is parametrized by a constant-width, relativistic Breit-Wigner. NODE=M169M;LINKAGE=B

[3] T-matrix pole from coupled channel K-matrix fit to data on $J/\psi \to \gamma\pi^0\pi^0$ (ABLIKIM 15AE) and $J/\psi \to \gamma K^0_S K^0_S$ (ABLIKIM 18AA). NODE=M169M;LINKAGE=A

[4] Partial wave analysis of the data on $p\overline{p} \to \overline{\Lambda}\Lambda$ from BARNES 00. NODE=M169M;LINKAGE=BU

$f_0(2330)$ WIDTH

NODE=M169W

VALUE (MeV)	DOCUMENT ID		TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •				
$65 \pm 10^{+3}_{-12}$	[1] ABLIKIM	22AS	BES3	$J/\psi(1S) \to \gamma\eta\eta'$
$134 \pm 5^{+30}_{-9}$	[2] ABLIKIM	22C	BES3	$J/\psi \to \gamma\eta'\eta' \to 4/5\gamma 2(\pi^+\pi^-)$
274 ± 94	[3] RODAS	22	RVUE	$J/\psi(1S) \to \gamma\ (\pi\pi,\ K\overline{K})$
165 ± 25	SARANTSEV	21	RVUE	$J/\psi(1S) \to \gamma\ (\pi\pi,\ K\overline{K},\ \eta\eta,\ \omega\phi)$
144 ± 20	[4] BUGG	04A	RVUE	
217 ± 33	ANISOVICH	00J	SPEC	$2.0\ \overline{p}p \to \pi\pi,\ \eta\eta$
~ 223	HASAN	94	RVUE	$\overline{p}p \to \pi\pi$

[1] From a Breit-Wigner fit involving 9 resonances and a resonating exotic $\eta_1(1855) \to \eta\eta'$ P-wave. NODE=M169W;LINKAGE=C

[2] From a partial wave analysis of the systems (γX), with $X \to \eta'\eta'$, and $(\eta' X)$, with $X \to \gamma\eta'$ in the decay $J/\psi \to \gamma\eta'\eta'$. The intermediate resonance X is parametrized by a constant-width, relativistic Breit-Wigner. NODE=M169W;LINKAGE=B

[3] T-matrix pole from coupled channel K-matrix fit to data on $J/\psi \to \gamma\pi^0\pi^0$ (ABLIKIM 15AE) and $J/\psi \to \gamma K^0_S K^0_S$ (ABLIKIM 18AA). NODE=M169W;LINKAGE=A

[4] Partial wave analysis of the data on $p\overline{p} \to \overline{\Lambda}\Lambda$ from BARNES 00. NODE=M169W;LINKAGE=BU

$f_0(2330)$ REFERENCES

NODE=M169

ABLIKIM	22AS	PR D106 072012	M. Ablikim *et al.*	(BESIII Collab.)	REFID=61891
Also		PR D107 079901 (errat.)	M. Ablikim *et al.*	(BESIII Collab.)	REFID=62033
ABLIKIM	22C	PR D105 072002	M. Ablikim *et al.*	(BESIII Collab.)	REFID=61637
RODAS	22	EPJ C82 80	A. Rodas *et al.*	(JPAC Collab.)	REFID=61610
SARANTSEV	21	PL B816 136227	A.V. Sarantsev *et al.*	(BONN, PNPI)	REFID=61091
ABLIKIM	18AA	PR D98 072003	M. Ablikim *et al.*	(BESIII Collab.)	REFID=59455
ABLIKIM	15AE	PR D92 052003	M. Ablikim *et al.*	(BESIII Collab.)	REFID=56984
BUGG	04A	EPJ C36 161	D.V. Bugg		REFID=50158
ANISOVICH	00J	PL B491 47	A.V. Anisovich *et al.*	(RAL, LOQM, PNPI+)	REFID=47950
BARNES	00	PR C62 055203	P.D. Barnes *et al.*		REFID=47965
HASAN	94	PL B334 215	A. Hasan, D.V. Bugg	(LOQM)	REFID=44103