$f_0(2100)$

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

OMITTED FROM SUMMARY TABLE

Needs confirmation.

$f_0(2100)$ MASS

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
2095^{+17}_{-19} OUR AVERAGE					
$2116 \pm 27 \pm 17$		LEES	21A	BABR	$\gamma\gamma \to \eta_c(1S) \to \eta' \pi^+ \pi^-$
$2081 \pm 13^{+24}_{-36}$	5.5k	[1] ABLIKIM	13N	BES3	$e^+ e^- \to J/\psi \to \gamma\eta\eta$
2090 ± 30		BAI	00A	BES	$J/\psi \to \gamma(\pi^+\pi^-\pi^+\pi^-)$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
2075 ± 20		SARANTSEV	21	RVUE	$J/\psi(1S) \to \gamma\,(\pi\pi,\ K\overline{K},\ \eta\eta,\ \omega\phi)$
$2090 \pm 10 \pm 6$	529	[2,3] DOBBS	15		$J/\psi \to \gamma\pi^+\pi^-$
$2099 \pm 17 \pm 8$	283	[2,3] DOBBS	15		$\psi(2S) \to \gamma\pi^+\pi^-$
2105 ± 8	80k	[4] UMAN	06	E835	$5.2\ \overline{p}p \to \eta\eta\pi^0$
2102 ± 13		[5] ANISOVICH	00J	SPEC	$2.0\ \overline{p}p \to \eta\pi^0\pi^0,\ \pi^0\pi^0,\ \eta\eta,\ \eta\eta',\ \pi^+\pi^-$
2105 ± 10		ANISOVICH	99K	SPEC	0.6–$1.94\ \overline{p}p \to \eta\eta,\ \eta\eta'$
~ 2104		BUGG	95		$J/\psi \to \gamma\pi^+\pi^-\pi^+\pi^-$
~ 2122		HASAN	94	RVUE	$\overline{p}p \to \pi\pi$

[1] From partial wave analysis including all possible combinations of 0^{++}, 2^{++}, and 4^{++} resonances.
[2] Using CLEO-c data but not authored by the CLEO Collaboration.
[3] From a fit to a Breit-Wigner line shape with fixed $\Gamma = 209$ MeV.
[4] Statistical error only.
[5] Includes the data of ANISOVICH 00B indicating to exotic decay pattern.

$f_0(2100)$ WIDTH

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
287^{+32}_{-24} OUR AVERAGE					
$289 \pm 34 \pm 15$		LEES	21A	BABR	$\gamma\gamma \to \eta_c(1S) \to \eta' \pi^+ \pi^-$
273^{+27+70}_{-24-23}	5.5k	[1] ABLIKIM	13N	BES3	$e^+ e^- \to J/\psi \to \gamma\eta\eta$
330 ± 100		BAI	00A	BES	$J/\psi \to \gamma(\pi^+\pi^-\pi^+\pi^-)$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
260 ± 25		SARANTSEV	21	RVUE	$J/\psi(1S) \to \gamma\,(\pi\pi,\ K\overline{K},\ \eta\eta,\ \omega\phi)$
236 ± 14	80k	[2] UMAN	06	E835	$5.2\ \overline{p}p \to \eta\eta\pi^0$
211 ± 29		[3] ANISOVICH	00J	SPEC	$2.0\ \overline{p}p \to \eta\pi^0\pi^0,\ \pi^0\pi^0,\ \eta\eta,\ \eta\eta',\ \pi^+\pi^-$
200 ± 25		ANISOVICH	99K	SPEC	0.6–$1.94\ \overline{p}p \to \eta\eta,\ \eta\eta'$
~ 203		BUGG	95		$J/\psi \to \gamma\pi^+\pi^-\pi^+\pi^-$
~ 273		HASAN	94	RVUE	$\overline{p}p \to \pi\pi$

[1] From partial wave analysis including all possible combinations of 0^{++}, 2^{++}, and 4^{++} resonances.
[2] Statistical error only.
[3] Includes the data of ANISOVICH 00B indicating to exotic decay pattern.

$f_0(2100)$ REFERENCES

LEES	21A	PR D104 072002	J.P. Lees *et al.*	(BABAR Collab.)
SARANTSEV	21	PL B816 136227	A.V. Sarantsev *et al.*	(BONN, PNPI)
DOBBS	15	PR D91 052006	S. Dobbs *et al.*	(NWES)
ABLIKIM	13N	PR D87 092009	M. Ablikim *et al.*	(BESIII Collab.)
UMAN	06	PR D73 052009	I. Uman *et al.*	(FNAL E835)
ANISOVICH	00B	NP A662 319	A.V. Anisovich *et al.*	
ANISOVICH	00J	PL B491 47	A.V. Anisovich *et al.*	(RAL, LOQM, PNPI+)
BAI	00A	PL B472 207	J.Z. Bai *et al.*	(BES Collab.)
ANISOVICH	99K	PL B468 309	A.V. Anisovich *et al.*	
BUGG	95	PL B353 378	D.V. Bugg *et al.*	(LOQM, PNPI, WASH)
HASAN	94	PL B334 215	A. Hasan, D.V. Bugg	(LOQM)