

**$f_0(2100)$**

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

OMITTED FROM SUMMARY TABLE

Needs confirmation.

**$f_0(2100)$  MASS**

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
<b>2101 ± 7 OUR AVERAGE</b>				
2081 ± 13 <sup>+24</sup> <sub>-36</sub>	5.5k	<sup>1</sup> ABLIKIM	13N BES3	$e^+e^- \rightarrow J/\psi \rightarrow \gamma\eta\eta$
2102 ± 13		<sup>2</sup> ANISOVICH	00J SPEC	$2.0 \bar{p}p \rightarrow \eta\pi^0\pi^0, \pi^0\pi^0, \eta\eta, \eta\eta', \pi^+\pi^-$
2090 ± 30		BAI	00A BES	$J/\psi \rightarrow \gamma(\pi^+\pi^-\pi^+\pi^-)$
2105 ± 10		ANISOVICH	99K SPEC	$0.6-1.94 \bar{p}p \rightarrow \eta\eta, \eta\eta'$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
2105 ± 8	80k	<sup>3</sup> UMAN	06 E835	$5.2 \bar{p}p \rightarrow \eta\eta\pi^0$
~ 2104		BUGG	95	$J/\psi \rightarrow \gamma\pi^+\pi^-\pi^+\pi^-$
~ 2122		HASAN	94 RVUE	$\bar{p}p \rightarrow \pi\pi$

<sup>1</sup> From partial wave analysis including all possible combinations of  $0^{++}$ ,  $2^{++}$ , and  $4^{++}$  resonances.

<sup>2</sup> Includes the data of ANISOVICH 00B indicating to exotic decay pattern.

<sup>3</sup> Statistical error only.

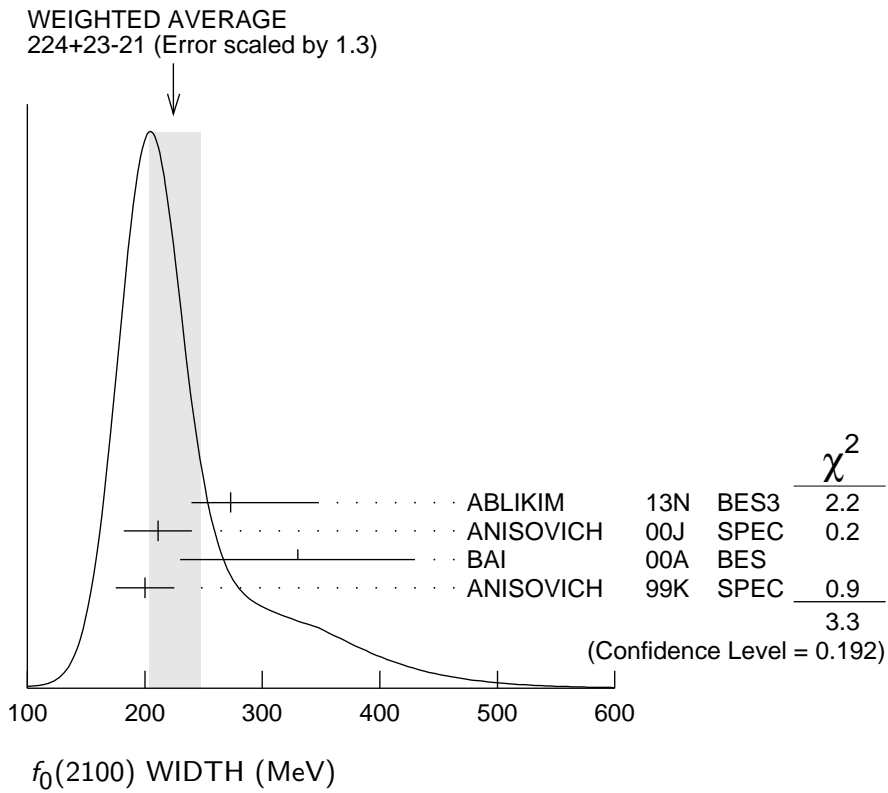
**$f_0(2100)$  WIDTH**

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
<b>224<sup>+</sup><sub>-21</sub> ± 23 OUR AVERAGE</b>				
Error includes scale factor of 1.3. See the ideogram below.				
273 <sup>+</sup> <sub>-24</sub> ± 27 <sup>+70</sup> <sub>-23</sub>	5.5k	<sup>4</sup> ABLIKIM	13N BES3	$e^+e^- \rightarrow J/\psi \rightarrow \gamma\eta\eta$
211 ± 29		<sup>5</sup> ANISOVICH	00J SPEC	$2.0 \bar{p}p \rightarrow \eta\pi^0\pi^0, \pi^0\pi^0, \eta\eta, \eta\eta', \pi^+\pi^-$
330 ± 100		BAI	00A BES	$J/\psi \rightarrow \gamma(\pi^+\pi^-\pi^+\pi^-)$
200 ± 25		ANISOVICH	99K SPEC	$0.6-1.94 \bar{p}p \rightarrow \eta\eta, \eta\eta'$
● ● ● We do not use the following data for averages, fits, limits, etc. ● ● ●				
236 ± 14	80k	<sup>6</sup> UMAN	06 E835	$5.2 \bar{p}p \rightarrow \eta\eta\pi^0$
~ 203		BUGG	95	$J/\psi \rightarrow \gamma\pi^+\pi^-\pi^+\pi^-$
~ 273		HASAN	94 RVUE	$\bar{p}p \rightarrow \pi\pi$

<sup>4</sup> From partial wave analysis including all possible combinations of  $0^{++}$ ,  $2^{++}$ , and  $4^{++}$  resonances.

<sup>5</sup> Includes the data of ANISOVICH 00B indicating to exotic decay pattern.

<sup>6</sup> Statistical error only.



### $f_0(2100)$ REFERENCES

ABLIKIM	13N	PR D87 092009	Ablikim M. <i>et al.</i>	(BES III Collab.)
UMAN	06	PR D73 052009	I. Uman <i>et al.</i>	(FNAL E835)
ANISOVICH	00B	NP A662 319	A.V. Anisovich <i>et al.</i>	
ANISOVICH	00J	PL B491 47	A.V. Anisovich <i>et al.</i>	
BAI	00A	PL B472 207	J.Z. Bai <i>et al.</i>	(BES Collab.)
ANISOVICH	99K	PL B468 309	A.V. Anisovich <i>et al.</i>	
BUGG	95	PL B353 378	D.V. Bugg <i>et al.</i>	(LOQM, PNPI, WASH)
HASAN	94	PL B334 215	A. Hasan, D.V. Bugg	(LOQM)