$\eta(2225)$

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

OMITTED FROM SUMMARY TABLE

Seen in $J/\psi \to \gamma\phi\phi$. Possibly seen in $B \to \phi\phi K$ by LEES 11A.

$\eta(2225)$ MASS

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
2221^{+13}_{-10} OUR AVERAGE					
$2216^{+\ 4+21}_{-\ 5-11}$		[1] ABLIKIM	16N	BES3	$J/\psi \to \gamma K^+K^-K^+K^-$
2240^{+30+30}_{-20-20}	196 ± 19	ABLIKIM	08I	BES	$J/\psi \to \gamma K^+K^-K^0_SK^0_L$
$2230 \pm 25 \pm 15$		BAI	90B	MRK3	$J/\psi \to \gamma K^+K^-K^+K^-$
$2214 \pm 20 \pm 13$		BAI	90B	MRK3	$J/\psi \to \gamma K^+K^-K^0_SK^0_L$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
~ 2220		BISELLO	86B	DM2	$J/\psi \to \gamma K^+K^-K^+K^-$

[1] From a partial wave analysis of $J/\psi \to \gamma\phi\phi$ that also finds significant signals for for $\eta(2100)$, 0^{-+} phase space, $f_0(2100)$, $f_2(2010)$, $f_2(2300)$, $f_2(2340)$, and a previously unseen 0^{-+} state $X(2500)$ ($M = 2470^{+15+101}_{-19-\ 23}$ MeV, $\Gamma = 230^{+64+56}_{-35-33}$ MeV).

$\eta(2225)$ WIDTH

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
$185^{+\ 40}_{-\ 20}$ OUR AVERAGE					
$185^{+\ 12+43}_{-\ 14-17}$		[1] ABLIKIM	16N	BES3	$J/\psi \to \gamma K^+K^-K^+K^-$
$190 \pm\ 30^{+60}_{-40}$	196 ± 19	ABLIKIM	08I	BES	$J/\psi \to \gamma K^+K^-K^0_SK^0_L$
$150^{+300}_{-\ 60} \pm 60$		BAI	90B	MRK3	$J/\psi \to \gamma K^+K^-K^+K^-$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
~ 80		BISELLO	86B	DM2	$J/\psi \to \gamma K^+K^-K^+K^-$

[1] From a partial wave analysis of $J/\psi \to \gamma\phi\phi$ that also finds significant signals for for $\eta(2100)$, 0^{-+} phase space, $f_0(2100)$, $f_2(2010)$, $f_2(2300)$, $f_2(2340)$, and a previously unseen 0^{-+} state $X(2500)$ ($M = 2470^{+15+101}_{-19-\ 23}$ MeV, $\Gamma = 230^{+64+56}_{-35-33}$ MeV).

$\eta(2225)$ REFERENCES

ABLIKIM	16N	PR D93 112011	M. Ablikim	(BESIII Collab.)
LEES	11A	PR D84 012001	J.P. Lees *et al.*	(BABAR Collab.)
ABLIKIM	08I	PL B662 330	M. Ablikim *et al.*	(BES Collab.)
BAI	90B	PRL 65 1309	Z. Bai *et al.*	(Mark III Collab.)
BISELLO	86B	PL B179 294	D. Bisello *et al.*	(DM2 Collab.)