

NODE=M237

$\chi_{c0}(3860)$

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

OMITTED FROM SUMMARY TABLE

The assignment $J^P = 0^+$ is preferred over 2^+ by 2.5 sigma.

NODE=M237

Observed by CHILIKIN 17 using full amplitude analysis of the process $e^+e^- \rightarrow J/\psi D\bar{D}$, where $D = D^0, D^+$. Not seen by AAIJ 20AI in the decay $B^+ \rightarrow D^+ D^- K^+$.

$\chi_{c0}(3860)$ MASS

NODE=M237M

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
3862^{+26+40}_{-32-13}	CHILIKIN	17	BELL $e^+e^- \rightarrow J/\psi D\bar{D}$

NODE=M237M

$\chi_{c0}(3860)$ WIDTH

NODE=M237W

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
$201^{+154+88}_{-67-82}$	CHILIKIN	17	BELL $e^+e^- \rightarrow J/\psi D\bar{D}$

NODE=M237W

$\chi_{c0}(3860)$ DECAY MODES

NODE=M237215;NODE=M237

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \quad D^0\bar{D}^0$	seen
$\Gamma_2 \quad D^+D^-$	seen

DESIG=1

DESIG=2

$\chi_{c0}(3860)$ BRANCHING RATIOS

NODE=M237220

$\Gamma(D^0\bar{D}^0)/\Gamma_{\text{total}}$				Γ_1/Γ
VALUE	DOCUMENT ID	TECN	COMMENT	
seen	CHILIKIN	17	BELL	$e^+e^- \rightarrow J/\psi D^0\bar{D}^0$
$\Gamma(D^+D^-)/\Gamma_{\text{total}}$				Γ_2/Γ
VALUE	DOCUMENT ID	TECN	COMMENT	
seen	CHILIKIN	17	BELL	$e^+e^- \rightarrow J/\psi D^+D^-$

NODE=M237R00
NODE=M237R00

NODE=M237R01
NODE=M237R01

$\chi_{c0}(3860)$ REFERENCES

NODE=M237

AAIJ	20AI	PR D102 112003	R. Aaij <i>et al.</i>	(LHCb Collab.)
CHILIKIN	17	PR D95 112003	K. Chilikin <i>et al.</i>	(BELLE Collab.) JPC

REFID=60739
REFID=57995