X(4230)

$I^G(J^{PC}) = ?^?(1^{--})$

OMITTED FROM SUMMARY TABLE

Enhancement reported by ABLIKIM 15C in $e^+e^- \to \omega\chi_{c0}$ at $\sqrt{s}$ = 4.23–4.26 GeV at 9σ significance. Lineshape found to be inconsistent with origination from $X(4260)$. NEEDS CONFIRMATION.

X(4230) MASS

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	COMMENT
4230±8±6	180	[1] ABLIKIM	15C	BES3	$e^+e^- \to \omega\chi_{c0}$

[1] From a 3-parameter fit of measured cross sections from $\sqrt{s}$ = 4.21–4.42 GeV to a phase-space modified Breit-Wigner function, using the decays $\chi_{c0} \to \pi^+\pi^-$, $\chi_{c0} \to K^+K^-$, and $\omega \to \pi^+\pi^-\pi^0$.

X(4230) WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID		TECN	COMMENT
38±12±2	180	[1] ABLIKIM	15C	BES3	$e^+e^- \to \omega\chi_{c0}$

[1] From a 3-parameter fit of measured cross sections from $\sqrt{s}$ = 4.21–4.42 GeV to a phase-space modified Breit-Wigner function, using the decays $\chi_{c0} \to \pi^+\pi^-$, $\chi_{c0} \to K^+K^-$, and $\omega \to \pi^+\pi^-\pi^0$.

X(4230) DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	e^+e^-	
Γ_2	$\omega\chi_{c0}$	seen

X(4230) Γ(i)Γ(e^+e^-)/Γ(total)

$\Gamma(\omega\chi_{c0}) \times \Gamma(e^+e^-)/\Gamma_{total}$ **$\Gamma_2\Gamma_1/\Gamma$**

VALUE (eV)	EVTS	DOCUMENT ID		TECN	COMMENT
2.7±0.5±0.4	180	[1] ABLIKIM	15C	BES3	$e^+e^- \to \omega\chi_{c0}$

[1] From a 3-parameter fit of measured cross sections from $\sqrt{s}$ = 4.21–4.42 GeV to a phase-space modified Breit-Wigner function, using the decays $\chi_{c0} \to \pi^+\pi^-$, $\chi_{c0} \to K^+K^-$, and $\omega \to \pi^+\pi^-\pi^0$.

X(4230) BRANCHING RATIOS

$\Gamma(\omega\chi_{c0})/\Gamma_{total}$ **Γ_2/Γ**

VALUE	EVTS	DOCUMENT ID		TECN	COMMENT
seen	180	[1] ABLIKIM	15C	BES3	$e^+e^- \to \omega\chi_{c0}$

[1] From a 3-parameter fit of measured cross sections from $\sqrt{s}$ = 4.21–4.42 GeV to a phase-space modified Breit-Wigner function, using the decays $\chi_{c0} \to \pi^+\pi^-$, $\chi_{c0} \to K^+K^-$, and $\omega \to \pi^+\pi^-\pi^0$.

X(4230) REFERENCES

ABLIKIM 15C PRL 114 092003 M. Ablikim et al. (BES III Collab.)