

X(4230)

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

OMITTED FROM SUMMARY TABLE

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

X(4230) MASS

<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
4230±8±6	180	¹ ABLIKIM	15C BES3	$e^+e^- \rightarrow \omega\chi_{c0}$

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

X(4230) WIDTH

<u>VALUE (MeV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
38±12±2	180	¹ ABLIKIM	15C BES3	$e^+e^- \rightarrow \omega\chi_{c0}$

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

X(4230) DECAY MODES

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

X(4230) $\Gamma(i)\Gamma(e^+e^-)/\Gamma(\text{total})$

$\Gamma(\omega\chi_{c0}) \times \Gamma(e^+e^-)/\Gamma_{\text{total}}$	$\Gamma_2\Gamma_1/\Gamma$			
<u>VALUE (eV)</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
2.7±0.5±0.4	180	¹ ABLIKIM	15C BES3	$e^+e^- \rightarrow \omega\chi_{c0}$

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

X(4230) BRANCHING RATIOS

$\Gamma(\omega\chi_{c0})/\Gamma_{\text{total}}$	Γ_2/Γ			
<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
seen	180	¹ ABLIKIM	15C BES3	$e^+e^- \rightarrow \omega\chi_{c0}$

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

X(4230) REFERENCES

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