

X(3900)⁰ $I(J^P) = ?(?)$

OMITTED FROM SUMMARY TABLE

Seen by XIAO 13A in $e^+ e^- \rightarrow \pi^0 X^0$, $X^0 \rightarrow \pi^0 J/\psi$ at $\sqrt{s} = 4170$ MeV. Likely the isospin partner of the $X(3900)^{\pm}$.

NODE=M211

X(3900)⁰ MASS

VALUE (MeV)	EVTS	DOCUMENT ID	COMMENT
3904±9±5	25 ± 7	¹ XIAO	13A 4.17 $e^+ e^- \rightarrow \pi^+ \pi^- J/\psi$
¹ For $M^2(\pi^0 \pi^0) < 0.65$ GeV ² and fixed width of 37 MeV. The signal has 3.5σ significance including systematic uncertainties. Obtained by analyzing CLEO-c data but not authored by the CLEO Collaboration.			

NODE=M211M

NODE=M211M

NODE=M211M;LINKAGE=A

X(3900)⁰ DECAY MODES

Mode	Fraction (Γ_i/Γ)
Γ_1 $J/\psi \pi^0$	seen
Γ_2 $J/\psi \eta$	not seen

NODE=M211215;NODE=M211

DESIG=1

DESIG=2

NODE=M211225

NODE=M211R01

NODE=M211R01

NODE=M211R01;LINKAGE=A

NODE=M211R02

NODE=M211R02

NODE=M211R03

NODE=M211R03

OCCUR=2

NODE=M211

REFID=56782

REFID=55593

X(3900)⁰ BRANCHING RATIOS

$\Gamma(J/\psi \pi^0)/\Gamma_{\text{total}}$	Γ_1/Γ
seen	25 ± 7
¹ Obtained by analyzing CLEO-c data but not authored by the CLEO Collaboration.	
$\Gamma(J/\psi \eta)/\Gamma_{\text{total}}$	Γ_2/Γ
not seen	$ABLIKIM \quad 15Q \quad BES3 \quad 4.0-4.6 \quad e^+ e^- \rightarrow J/\psi \eta \pi^0$
$\Gamma(J/\psi \eta)/\Gamma(J/\psi \pi^0)$	Γ_2/Γ_1
value	CL%
<0.15	90
• • • We do not use the following data for averages, fits, limits, etc. • • •	
<0.65	90

X(3900)⁰ REFERENCES

ABLIKIM	15Q	PR D92 012008	M. Ablikim <i>et al.</i>	(BES III Collab.)
XIAO	13A	PL B727 366	T. Xiao <i>et al.</i>	(NWES)