

Y(4260)

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

OMITTED FROM SUMMARY TABLE

Seen by AUBERT,B 05I in radiative return from e^+e^- collisions at the 10.6 GeV center-of-mass energy and by AUBERT 06 in $B^- \rightarrow K^- \pi^+ \pi^- J/\psi$. Interpretation as due to two interfering resonances is not excluded.

Y(4260) MASS

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
$4259 \pm 8_{-6}^{+2}$	125	¹ AUBERT,B	05I BABR	10.58 $e^+e^- \rightarrow \gamma\pi^+\pi^- J/\psi$

¹ From a single-resonance fit. Two interfering resonances, one with close mass and a width of 50 MeV and another narrow at 4330 MeV, are not excluded.

Y(4260) WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
$88 \pm 23_{-4}^{+6}$	125	² AUBERT,B	05I BABR	10.58 $e^+e^- \rightarrow \gamma\pi^+\pi^- J/\psi$

² From a single-resonance fit. Two interfering resonances, one with close mass and a width of 50 MeV and another narrow at 4330 MeV, are not excluded.

Y(4260) DECAY MODES

Mode	Fraction (Γ_i/Γ)
Γ_1 e^+e^-	
Γ_2 $J/\psi\pi^+\pi^-$	seen
Γ_3 $J/\psi\pi^0\pi^0$	[a] seen
Γ_4 $J/\psi K^+K^-$	[a] seen
Γ_5 $J/\psi\eta$	[a] not seen
Γ_6 $J/\psi\pi^0$	[a] not seen
Γ_7 $J/\psi\eta'$	[a] not seen
Γ_8 $J/\psi\pi^+\pi^-\pi^0$	[a] not seen
Γ_9 $J/\psi\eta\eta$	[a] not seen
Γ_{10} $\psi(2S)\pi^+\pi^-$	[a] not seen
Γ_{11} $\psi(2S)\eta$	[a] not seen
Γ_{12} $\chi_{c0}\omega$	[a] not seen
Γ_{13} $\chi_{c1}\gamma$	[a] not seen
Γ_{14} $\chi_{c2}\gamma$	[a] not seen
Γ_{15} $\chi_{c1}\pi^+\pi^-\pi^0$	[a] not seen
Γ_{16} $\chi_{c2}\pi^+\pi^-\pi^0$	[a] not seen
Γ_{17} $\phi\pi^+\pi^-$	[a] not seen
Γ_{18} $\rho\bar{\rho}$	

[a] See COAN 06 for details.

Y(4260) $\Gamma(i)\Gamma(e^+e^-)/\Gamma(\text{total})$

$\Gamma(J/\psi\pi^+\pi^-) \times \Gamma(e^+e^-)/\Gamma_{\text{total}}$					$\Gamma_2\Gamma_1/\Gamma$
VALUE	EVTS	DOCUMENT ID	TECN	COMMENT	
$5.5 \pm 1.0^{+0.8}_{-0.7}$	125	³ AUBERT,B	05I BABR	10.58 $e^+e^- \rightarrow \gamma\pi^+\pi^- J/\psi$	

³ From a single-resonance fit. Two interfering resonances, one with close mass and a width of 50 MeV and another narrow at 4330 MeV, are not excluded.

Y(4260) BRANCHING RATIOS

$\Gamma(p\bar{p})/\Gamma(J/\psi\pi^+\pi^-)$					Γ_{18}/Γ_2
VALUE	CL%	DOCUMENT ID	COMMENT		
<0.13	90	⁴ AUBERT	06B $e^+e^- \rightarrow p\bar{p}\gamma$		

⁴ Using 4259 ± 10 MeV for the mass and 88 ± 24 MeV for the width of Y(4260).

Y(4260) REFERENCES

AUBERT	06	PR D73 011101R	B. Aubert <i>et al.</i>	(BABAR Collab.)
AUBERT	06B	PR D73 012005	B. Aubert <i>et al.</i>	(BABAR Collab.)
COAN	06	PRL 96 162003	T.E. Coan <i>et al.</i>	(CLEO Collab.)
AUBERT,B	05I	PRL 95 142001	B. Aubert <i>et al.</i>	(BABAR Collab.)

OTHER RELATED PAPERS

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BIGI	05	PR D72 114016	I. Bigi <i>et al.</i>
CLOSE	05A	PL B628 215	F.E. Close, P.R. Page
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