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

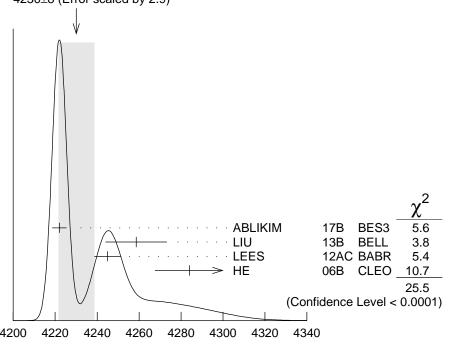
Seen in radiative return from e^+e^- collisions at $\sqrt{s}=9.54$ –10.58 GeV by AUBERT,B 05I, HE 06B, and YUAN 07, and in e^+e^- collisions at $\sqrt{s}\approx 4.26$ GeV by COAN 06. Possibly seen by AUBERT 06 in $B^-\to K^-\pi^+\pi^-J/\psi$. See also the mini-review under the X(3872). (See the index for the page number.)

X(4260) MASS

• • • We do not use the following data for averages, fits, limits, etc. • • •

4247
$$\pm 12 \, {}^{+17}_{-32} \, {}^{2,4}$$
 YUAN 07 BELL $10.58 \, e^+ e^- \rightarrow \, \gamma \pi^+ \pi^- \, J/\psi$ 4259 $\pm \, 8 \, {}^+_{-6} \, 125 \, {}^5$ AUBERT,B 051 BABR $10.58 \, e^+ e^- \rightarrow \, \gamma \pi^+ \pi^- \, J/\psi$

WEIGHTED AVERAGE 4230±8 (Error scaled by 2.9)



X(4260) MASS (MeV)

¹ From a three-resonance fit.

² From a two-resonance fit.

 $^{^3}$ From a single-resonance fit. Supersedes AUBERT,B 051.

X(4260) WIDTH

VALUE (MeV) DOCUMENT ID TECN COMMENT **EVTS OUR AVERAGE** Error includes scale factor of 4.4. See the ideogram below. 17B BES3 $e^+e^- \rightarrow \pi^+\pi^-J/\psi$ ¹ ABLIKIM $44.1 \pm 4.3 \pm 2.0$ 13B BELL $e^+e^- \rightarrow \gamma \pi^+ \pi^- J/\psi$ ² LIU $134.1 \pm 16.4 \pm 5.5$ $114 \begin{array}{c} +16 \\ -15 \end{array} \pm \ 7$ 12AC BABR 10.58 $e^+e^- \rightarrow \gamma \pi^+\pi^- J/\psi$ ³ LEES 06B CLEO 9.4–10.6 $e^+e^- \to \gamma \pi^+\pi^- J/\psi$ \pm 5 13.6 HE • • • We do not use the following data for averages, fits, limits, etc. • • • 2,4 YUAN BELL 10.58 $e^+e^- \rightarrow \gamma \pi^+\pi^- J/\psi$ 108 ± 19 ± 10 07 05I BABR 10.58 $e^+e^- \to \gamma \pi^+\pi^- J/\psi$ ± 23 125 ⁵ AUBERT,B

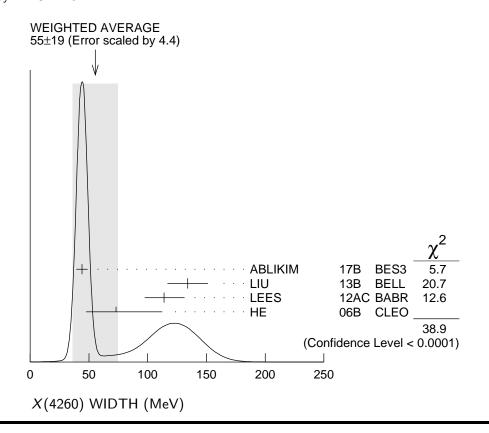
¹ From a three-resonance fit.

² From a two-resonance fit.

³ From a single-resonance fit. Supersedes AUBERT,B 051.

⁴ Superseded by LIU 13B.

⁵ From a single-resonance fit. Two interfering resonances are not excluded. Superseded by LEES 12AC.



⁴Superseded by LIU 13B.

⁵ From a single-resonance fit. Two interfering resonances are not excluded. Superseded by LEES 12AC.

X(4260) DECAY MODES

	Mode	Fraction (Γ_i/Γ)
<u>Γ</u> 1	e^+e^-	
Γ_2	$J/\psi \pi^+ \pi^-$	seen
Γ ₃		seen
Γ_4		seen
	$J/\psi \pi^0 \pi^0$	seen
	$J/\psi K^+ K^-$	seen
Γ ₇	$J/\psi K_S^0 K_S^0$	not seen
	$X(3872)\gamma$	seen
	$J/\psi \eta$	not seen
	$J/\psi \pi^0$	not seen
	$J/\psi \eta'$	not seen
Γ ₁₂	$J/\psi \pi^{+} \pi^{-} \pi^{0}$	not seen
	$J/\psi \eta \pi^0$	not seen
	$J/\psi\eta\eta$	not seen
Γ_{15}	$\psi(2S)\pi^+\pi^-$	not seen
Γ_{16}	$\psi(2S)\eta$	not seen
Γ_{17}	$\chi_{c0}\omega$	not seen
Γ_{18}	$\chi_{c1}\gamma$	not seen
Γ_{19}	$\chi_{c2}\gamma$	not seen
Γ ₂₀	$\chi_{c1}\pi^+\pi^-\pi^0$	not seen
Γ_{21}	$\chi_{c2}\pi^{+}\pi^{-}\pi^{0}$	not seen
	$h_c(1P)\pi^+\pi^-$	not seen
	$\phi \pi^+ \pi^-$	not seen
Γ_{24}	$\frac{\phi f_0(980)}{DD} \rightarrow \phi \pi^+ \pi^-$	not seen
23	DD_{0}	not seen
Γ ₂₆	$D^0 \overline{D}{}^0$	not seen
21	D^+D^-	not seen
	$D^*D + c.c.$	not seen
Γ ₂₉	$D^*(2007)^0 \overline{D}{}^0 + \text{c.c.}$	not seen
I ₃₀	$D^*(2010)^+ D^- + \text{c.c.}$	not seen
Γ ₃₁	D* \(\overline{D}^* \)	not seen
Γ ₃₂	$D^*(2007)^0 \overline{D}^*(2007)^0$	not seen
Γ ₃₃	$D^*(2010)^+ D^*(2010)^-$	not seen
Γ ₃₄	$DD\pi$ +c.c.	
Γ ₃₅	$D^0 D^- \pi^+ + \text{c.c.}$ (excl.	not seen
	$D^*(2007)^0 \overline{D}^{*0} + \text{c.c.},$	
F	$D^*(2010)^+D^- + c.c.$	
Г ₃₆	$D\overline{D}^*\pi$ +c.c. (excl. $D^*\overline{D}^*$)	not seen
Γ ₃₇	$D^0 D^{*-} \pi^+ + \text{c.c.}$ (excl.	not seen
F	$D^*(2010)^+D^*(2010)^-$	
Γ ₃₈	$D^0 D^* (2010)^- \pi^+ + c.c.$	not seen

Γ ₃₉	$D^* \overline{D}{}^* \pi$	not seen
Γ_{40}	$D_s^+ D_s^-$	not seen
Γ_{41}	$D_s^{*+}D_s^- + \text{c.c.}$	not seen
Γ_{42}	$D_s^{*+}D_s^{*-}$	not seen
Γ_{43}	<i>p</i> p	not seen
Γ_{44}	$K^0_S K^{\pm} \pi^{\mp}$	not seen
Γ_{45}	$K^{\frac{3}{+}}K^{-}\pi^{0}$	not seen

$X(4260) \Gamma(i) \times \Gamma(e^+e^-)/\Gamma(total)$

$\Gamma \left(J/\psi \, \pi^+ \pi^- ight) \, imes \, \Gamma \left(e^+ \, e^- ight) / \Gamma_{ m total}$

 $\Gamma_2\Gamma_1/\Gamma$

9.2 ± 1.0 OUR F	WENA	GE			
$9.2\!\pm\!0.8\!\pm\!0.7$		¹ LEES	12AC	BABR	10.58 $e^+e^- \rightarrow \gamma \pi^+\pi^- J/\psi$
$8.9^{+3.9}_{-3.1}\pm1.8$	8.1	HE	06 B	CLEO	9.4–10.6 $e^+e^- \to \gamma \pi^+\pi^- J/\psi$
• • • We do not	use th	ne following data fo	r avei	rages, fit	s, limits, etc. • • •
$6.4\!\pm\!0.8\!\pm\!0.6$		² LIU	13 B	BELL	$e^+e^- \rightarrow \gamma \pi^+\pi^- J/\psi$
$20.5\!\pm\!1.4\!\pm\!2.0$		³ LIU	13 B	BELL	$e^+e^- \rightarrow \gamma \pi^+\pi^- J/\psi$
$6.0\pm1.2^{ightarrow4.7}_{-0.5}$		^{2,4} YUAN	07	BELL	$10.58~e^+e^- \rightarrow ~\gamma \pi^+\pi^- J/\psi$
$20.6\!\pm\!2.3\!+\!9.1 \\ -1.7$		^{3,4} YUAN	07	BELL	$10.58~e^+e^-\rightarrow~\gamma\pi^+\pi^-J/\psi$
$5.5\!\pm\!1.0_{-0.7}^{+0.8}$	125	⁵ AUBERT,B	051	BABR	10.58 $e^+e^- \rightarrow \gamma \pi^+\pi^- J/\psi$

¹ From a single-resonance fit. Supersedes AUBERT, B 051.

$$\frac{\Gamma(J/\psi K^+ K^-) \times \Gamma(e^+ e^-)/\Gamma_{\text{total}}}{\text{<1.7}} \qquad \frac{\Gamma(e^+ e^-)/\Gamma_{\text{total}}}{\text{SHEN}} \qquad \frac{\Gamma_6 \Gamma_1/\Gamma_0}{\text{SHEL}} \qquad \frac$$

• • • We do not use the following data for averages, fits, limits, etc. • • •

<1.2 90
2
 YUAN 08 BELL $e^+e^-
ightarrow \gamma K^+K^-J/\psi$

$$\Gamma(J/\psi K_S^0 K_S^0)$$
 × $\Gamma(e^+e^-)/\Gamma_{total}$ $\Gamma_7\Gamma_1/\Gamma$ $VALUE (eV)$ $CL\%$ $DOCUMENT ID$ $TECN$ $COMMENT$ $COMMENT$

² Solution I of two equivalent solutions in a fit using two interfering resonances.

³ Solution II of two equivalent solutions in a fit using two interfering resonances.

⁴ Superseded by LIU 13B.

⁵ From a single-resonance fit. Two interfering resonances are not excluded. Superseded by LEES 12AC.

 $^{^1}$ From a fit of the broad $K^+\,K^-\,J/\psi$ enhancement including a coherent X(4260) amplitude with mass and width from LIU 13B. Supersedes YUAN 08.

² From a fit of the broad K^+K^-J/ψ enhancement including a coherent X(4260) amplitude with mass and width from YUAN 07.

 $^{^1}$ From a fit of the $K^0_S\,K^0_S\,J/\psi$ mass range from 4.4 to 5.5 GeV including a coherent X(4260) amplitude with mass and width from LIU 13B.

```
\Gamma(J/\psi\eta) \times \Gamma(e^+e^-)/\Gamma_{\text{total}}
                                                                                                              \Gamma_0\Gamma_1/\Gamma
                                                  DOCUMENT ID
• • • We do not use the following data for averages, fits, limits, etc. • • •
                                  90
                                                 WANG
                                                                       13B BELL e^+e^- \rightarrow J/\psi \eta \gamma
<14.2
\Gamma(\psi(2S)\pi^+\pi^-) \times \Gamma(e^+e^-)/\Gamma_{\text{total}}
                                                                                                            \Gamma_{15}\Gamma_1/\Gamma
                                                                  TECN COMMENT
VALUE (eV) CL%
                                      DOCUMENT ID
• • • We do not use the following data for averages, fits, limits, etc. • • •
                                                           08H RVUE 10.58 e^{+}e^{-} \rightarrow \psi(2S)\pi^{+}\pi^{-}\gamma
                                    1_{\text{H}}
<4.3
   7.4^{+2.1}_{-1.7}
                                    ^2 LIU
                                                           08H RVUE 10.58 e^+e^- \rightarrow \psi(2S) \pi^+\pi^- \gamma
   <sup>1</sup> For constructive interference with the X(4360) in a combined fit of AUBERT 07S and
     WANG 07D data with three resonances.
   <sup>2</sup> For destructive interference with the X(4360) in a combined fit of AUBERT 07S and
     WANG 07D data with three resonances.
\Gamma(\chi_{c1}\gamma) \times \Gamma(e^+e^-)/\Gamma_{\text{total}}
                                                                                                            \Gamma_{18}\Gamma_1/\Gamma
<1.4
                                                                              BELL 10.58 e^+e^- \rightarrow \chi_{c1} \gamma
   <sup>1</sup> Using B(\eta \to \gamma \gamma) = (39.41 ± 0.21)%.
\Gamma(\chi_{c2}\gamma) \times \Gamma(e^+e^-)/\Gamma_{\text{total}}
                                                                                                            \Gamma_{19}\Gamma_1/\Gamma
                                               <sup>1</sup> HAN
                                                                              BELL 10.58 e^+e^- \rightarrow \chi_{c2}\gamma
 <4.0
   <sup>1</sup> Using B(\eta \to \gamma \gamma) = (39.41 ± 0.21)%.
\Gamma(\phi \pi^+ \pi^-) \times \Gamma(e^+ e^-)/\Gamma_{\text{total}}
                                                                                                            \Gamma_{23}\Gamma_1/\Gamma
               CL%
                                     AUBERT, BE 06D BABR 10.6 e^+e^- \rightarrow K^+K^-\pi^+\pi^-\gamma
 < 0.4
                      90
\Gamma(\phi f_0(980) \rightarrow \phi \pi^+ \pi^-) \times \Gamma(e^+ e^-)/\Gamma_{\text{total}}
                                     DOCUMENT ID TECN COMMENT
                                                          07AK BABR 10.6 e^{+}e^{-} \rightarrow \pi^{+}\pi^{-}K^{+}K^{-}\gamma
                                   <sup>1</sup> AUBFRT
 < 0.29
                      90
   ^1 AUBERT 07AK reports [\Gamma(X(4260) 
ightarrow \phi f_0(980) 
ightarrow \phi \pi^+\pi^-) 	imes \Gamma(X(4260) 
ightarrow
     {
m e^+\,e^-})/\Gamma_{
m total}] 	imes [B(\phi(1020) 
ightarrow {
m \it K^+\,\it K^-})] < 0.14 eV which we divide by our best
     value B(\phi(1020) \rightarrow K^+K^-) = 48.9 × 10<sup>-2</sup>.
\Gamma(K_s^0 K^{\pm} \pi^{\mp}) \times \Gamma(e^+ e^-) / \Gamma_{\text{total}}
                                                                                                            \Gamma_{44}\Gamma_{1}/\Gamma
                       <u>CL%</u>
                                        DOCUMENT ID
                                                                TECN COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •
                                                             08S BABR 10.6 e^+e^- \rightarrow K_S^0 K^{\pm} \pi^{\mp} \gamma
                                        AUBERT
< 0.5
\Gamma(K^+K^-\pi^0) \times \Gamma(e^+e^-)/\Gamma_{\text{total}}
                                                                                                            \Gamma_{45}\Gamma_1/\Gamma
                                         DOCUMENT ID
ullet ullet We do not use the following data for averages, fits, limits, etc.
                                                              08S BABR 10.6 e^{+}e^{-} \rightarrow K^{+}K^{-}\pi^{0}\gamma
 < 0.6
                         90
                                         AUBERT
```

X(4260) BRANCHING RATIOS

$\Gamma(J/\psi f_0(980), f_0(980) \to \pi^2$	
· ·	CUMENT ID TECN COMMENT
	g data for averages, fits, limits, etc. \bullet \bullet ES 12AC BABR 10.58 $e^+e^- \rightarrow \gamma \pi^+\pi^- J/\psi$
¹ Systematic uncertainties not e	, , ,
$\Gamma(X(3900)^{\pm}\pi^{\mp}, X^{\pm} \rightarrow J/\psi$ VALUE	$(\sigma \pi^{\pm})/\Gamma(J/\psi \pi^{+} \pi^{-})$ Γ_{4}/Γ_{2}
0.215±0.033±0.075 • • • We do not use the followin	1 ABLIKIM 13T BES3 e ⁺ e ⁻ \rightarrow $\pi^{+}\pi^{-}J/\psi$ g data for averages, fits, limits, etc. • •
0.29 ±0.08	² LIU 13B BELL $e^+e^- \rightarrow \gamma \pi^+ \pi^- J/\psi$
Assuming that the cross section	on of $e^+e^- \rightarrow \pi^+\pi^- J/\psi$ is fully due to the $X(4260)$.
² Systematic error not evaluated	d.
$\Gamma(J/\psi K_S^0 K_S^0)/\Gamma_{\text{total}}$	Γ ₇ /Γ
not seen SHEN	14 BELL 2004 SELL 2004 SE
$\Gamma(X(3872)\gamma)/\Gamma_{\text{total}}$	Γ ₈ /Γ
VALUE EVTS	DOCUMENT ID TECN COMMENT
seen 20 ± 5	ABLIKIM 14 BES3 $e^+e^- \rightarrow J/\psi \pi^+\pi^- \gamma$
$\Gammaig(J/\psi \eta \pi^0 ig)/\Gamma_{ m total}$	Γ ₁₃ /Γ
	DOCUMENT ID TECN COMMENT
	ABLIKIM 15Q BES3 4.0–4.6 $e^+e^- \rightarrow J/\psi \eta \pi^0$
$\Gamma(h_c(1P)\pi^+\pi^-)/\Gamma(J/\psi\pi^+)$	
<u>VALUE</u> <u>CL%</u> <1.0 90	
1 At $\sqrt{s}=$ 4260 MeV, PEDLAR	11 measures $\sigma(e^+e^- \to h_c(1P)\pi^+\pi^-) = 32\pm17\pm6\pm$ tistical, systematic, and due to uncertainty in B($\psi(2S)$ \to
$\Gamma(D\overline{D})/\Gamma(J/\psi\pi^+\pi^-)$	Γ_{25}/Γ_2
	DOCUMENT ID TECN COMMENT
<1.0 90	1 AUBERT 07BE BABR $e^+e^- ightarrow D\overline{D}\gamma$ g data for averages, fits, limits, etc. $ullet$ $ullet$
< 4.0 90	CRONIN-HEN09 CLEO e^+e^-
	mass and 88 \pm 24 MeV for the width of $X(4260)$.
$\Gamma(D^0\overline{D}{}^0)/\Gamma_{total}$	Γ ₂₆ /Γ
VALUE	DOCUMENT ID TECN COMMENT
not seen• • We do not use the followin	CRONIN-HEN09 CLEO $e^+e^- ightarrow D^0\overline{D}{}^0$ g data for averages, fits, limits, etc. $ullet$ $ullet$
not seen	AUBERT 09M BABR $e^+e^- ightarrow {\it D}^0{\it \overline{D}}^0\gamma$
not seen	PAKHLOVA 08 BELL $e^+e^- ightarrow {\it D}^0{ m \overline{\it D}}^0\gamma$
HTTP://PDG.LBL.GOV	Page 6 Created: 5/30/2017 17:21

```
DOCUMENT ID TECN COMMENT
                                         CRONIN-HEN..09 CLEO e^+e^- \rightarrow D^+D^-
• • • We do not use the following data for averages, fits, limits, etc. • • •
                                                           09M BABR e^+e^- \rightarrow D^+D^-\gamma
                                         AUBERT
not seen
                                                                 BELL e^+e^- \rightarrow D^+D^-\gamma
                                                           80
not seen
                                         PAKHLOVA
                                                                                            \Gamma_{28}/\Gamma_{2}
\Gamma(D^*D+c.c.)/\Gamma(J/\psi\pi^+\pi^-)
                                                                 <u>TECN</u> <u>COMMENT</u>
                                                           09M BABR e^+e^- → \gamma D^*\overline{D}
<34
                                         AUBERT
• • • We do not use the following data for averages, fits, limits, etc. • • •
                                         CRONIN-HEN..09 CLEO e^+e^-
<45
\Gamma(D^*(2007)^0\overline{D}^0+\text{c.c.})/\Gamma_{\text{total}}
                                                                                              \Gamma_{29}/\Gamma
VALUE
                                                               CLEO e^+e^- \rightarrow D^{*0}\overline{D}{}^0
not seen
                                         CRONIN-HEN..09
• • We do not use the following data for averages, fits, limits, etc. • •
                                                           09M BABR e^+e^- \rightarrow D^{*0}\overline{D}^0\gamma
                                          AUBERT
not seen
\Gamma(D^*(2010)^+D^-+c.c.)/\Gamma_{total}
                                                                                              \Gamma_{30}/\Gamma
                                                                 TECN COMMENT
                                                                 CLEO e^+e^- \rightarrow D^{*+}D^-
                                          CRONIN-HEN..09
not seen
                                                                 BELL e^+e^- \rightarrow D^{*+}D^- \gamma
                                         PAKHLOVA
                                                           07
not seen
• • • We do not use the following data for averages, fits, limits, etc. • • •
                                                           09M BABR e^+e^- \rightarrow D^{*+}D^-\gamma
                                         AUBERT
\Gamma(D^*\overline{D}^*)/\Gamma(J/\psi\pi^+\pi^-)
                                         DOCUMENT ID TECN COMMENT
                                         CRONIN-HEN..09 CLEO e^+e^-
• • • We do not use the following data for averages, fits, limits, etc. • • •
                                                           09M BABR e^+e^- \rightarrow \gamma D^* \overline{D}^*
<40
                                          AUBERT
\Gamma(D^*(2007)^0 \overline{D}^*(2007)^0) / \Gamma_{\text{total}}
                                                                                              \Gamma_{32}/\Gamma
VALUE
                                         DOCUMENT ID
                                                               TECN COMMENT
                                         CRONIN-HEN..09 CLEO e^+e^- \rightarrow D^{*0}\overline{D}^{*0}

    • • We do not use the following data for averages, fits, limits, etc.

                                                           09M BABR e^+e^- \rightarrow D^{*0}\overline{D}^{*0}\gamma
not seen
                                          AUBERT
\Gamma(D^*(2010)^+D^*(2010)^-)/\Gamma_{\text{total}}
                                                                                              \Gamma_{33}/\Gamma
<u>VALUE</u>
                                         DOCUMENT ID
                                                               TECN COMMENT
                                                                 CLEO e^+e^- \rightarrow D^{*+}D^{*-}
not seen
                                         CRONIN-HEN..09
                                                                 BELL e^+e^- \rightarrow D^{*+}D^{*-}\gamma
not seen
                                         PAKHLOVA
                                                           07
• • • We do not use the following data for averages, fits, limits, etc. • • •
                                                           09M BABR e^+e^- \to D^{*+}D^{*-}\gamma
                                         AUBERT
not seen
```

```
\Gamma(D^0D^-\pi^+ + \text{c.c.} \text{ (excl. } D^*(2007)^0\overline{D}^{*0} + \text{c.c.}, D^*(2010)^+D^- + \text{c.c.}))/
\Gamma_{total}
                                                                                                          \Gamma_{35}/\Gamma
VALUE
                                               DOCUMENT ID
                                                                          TECN
                                               PAKHLOVA
not seen
                                                                   08A BELL
\Gamma(D\overline{D}^*\pi + \text{c.c.} (\text{excl. } D^*\overline{D}^*))/\Gamma_{\text{total}}
                                                                                                          \Gamma_{36}/\Gamma
                                                                          TECN COMMENT
                                                                          CLEO e^+e^- \rightarrow D^*\overline{D}\pi
not seen
                                               CRONIN-HEN..09
\Gamma(D\overline{D}^*\pi + \text{c.c.} (\text{excl. } D^*\overline{D}^*))/\Gamma(J/\psi\pi^+\pi^-)
<15
                                               CRONIN-HEN..09
\Gamma(D^0D^{*-}\pi^+ + \text{c.c.} \text{ (excl. } D^*(2010)^+D^*(2010)^-))/\Gamma_{\text{total}}
                                                                                                          \Gamma_{37}/\Gamma
                                               DOCUMENT ID
not seen
                                               PAKHLOVA
\Gamma(D^0 D^*(2010)^- \pi^+ + \text{c.c.}) / \Gamma(J/\psi \pi^+ \pi^-)
<u>VALU</u>E
                                               DOCUMENT ID
                                                                          TECN COMMENT
 <9
                                               PAKHLOVA
                                                                          BELL e^+e^-
\Gamma(D^0D^*(2010)^-\pi^+ + \text{c.c.})/\Gamma_{\text{total}} \times \Gamma(e^+e^-)/\Gamma_{\text{total}}
                                                                                               \Gamma_{38}/\Gamma \times \Gamma_{1}/\Gamma
                                               DOCUMENT ID
                                                                          BELL e^+e^- \rightarrow D^0D^{*-}\pi^+
                                             <sup>1</sup> PAKHLOVA
   <sup>1</sup> Using 4263^{+8}_{-9} MeV for the mass of X(4260).
\Gamma(D^*\overline{D}^*\pi)/\Gamma_{\text{total}}
                                                                                                          \Gamma_{39}/\Gamma
VALUE
                                               DOCUMENT ID
                                                                          TECN COMMENT
                                               CRONIN-HEN..09
                                                                          CLEO e^+e^- \rightarrow D^*\overline{D}^*\pi
not seen
\Gamma(D^*\overline{D}^*\pi)/\Gamma(J/\psi\pi^+\pi^-
                                                                                                         \Gamma_{39}/\Gamma_2
VALUE
 <8.2
                                               CRONIN-HEN..09
                                                                          CLEO e^+e^-
\Gamma(D_s^+D_s^-)/\Gamma_{\text{total}}
                                                                                                          \Gamma_{40}/\Gamma
                                               DEL-AMO-SA..10N BABR e^+e
not seen
                                               CRONIN-HEN..09
• • We do not use the following data for averages, fits, limits, etc.
                                                                          BELL e^+e^- \rightarrow D_s^+D_s^-\gamma
                                               PAKHLOVA
\Gamma(D_s^+D_s^-)/\Gamma(J/\psi\pi^+\pi^-)
                                                                                                        \Gamma_{40}/\Gamma_2
                                                                          TECN COMMENT
 < 0.7
                                 95
                                               DEL-AMO-SA..10N BABR 10.6 e^+e^-
• • We do not use the following data for averages, fits, limits, etc. •
                                               CRONIN-HEN..09 CLEO e^+e^-
< 1.3
HTTP://PDG.LBL.GOV
                                                                           Created: 5/30/2017 17:21
                                                   Page 8
```

$\Gamma(D_s^{*+}D_s^-+\text{c.c.})/\Gamma_{tc}$	otal					Γ_{41}/Γ
VALUE		DOCUMENT ID				
not seen		DEL-AMO-SA	.10N	BABR	$e^+e^- \rightarrow$	$D_s^{*+}D_s^-\gamma$
not seen		CRONIN-HEN			$e^+e^- \rightarrow$	
• • • We do not use the	following o	data for averages				5 5
not seen		PAKHLOVA	11	BELL	$e^{+}e^{-}\rightarrow$	$D_s^{*+}D_s^-\gamma$
$\Gamma(D_s^{*+}D_s^-+\text{c.c.})/\Gamma()$	$J/\psi\pi^+\pi^-$	-)				Γ_{41}/Γ_{2}
• • • • • • •		DOCUMENT ID		TECN	COMMENT	
< 0.8		CRONIN-HEN				
• • • We do not use the	following o	data for averages	s, fits,	limits, e	etc. • • •	
<44	95	DEL-AMO-SA	.10N	BABR	$10.6 e^{+}e^{-}$	_
$\Gamma(D_s^{*+}D_s^{*-})/\Gamma_{total}$						Γ ₄₂ /Γ
VALUE		DOCUMENT ID		TECN	COMMENT	
not seen		CRONIN-HEN	09	CLEO	$e^+e^- \rightarrow$	$D_{s}^{*+}D_{s}^{*-}$
• • • We do not use the	following o					3 3
not seen		PAKHLOVA	11	BELL	$e^+e^- \rightarrow$	$D_{s}^{*+}D_{s}^{*-}\gamma$
not seen		DEL-AMO-SA				
$\Gamma(D_s^{*+}D_s^{*-})/\Gamma(J/\psi z)$	$\pi^{+}\pi^{-}$					Γ_{42}/Γ_{2}
VALUE		DOCUMENT ID		TECN	COMMENT	- 42/ - 2
< 9.5	90	CRONIN-HEN				
 ● ● We do not use the 	following o					
<30	95	DEL-AMO-SA	.10N	BABR	10.6 e ⁺ e ⁻	_
$\Gamma(\rho\overline{\rho})/\Gamma(J/\psi\pi^+\pi^-)$)					Γ_{43}/Γ_{2}
*		DOCUMENT ID		COMME	NT	
<0.13		¹ AUBERT	06 B	e^+e^-	$\rightarrow p\overline{p}\gamma$	
1 Using 4259 \pm 10 MeV	V for the m	ass and 88 \pm 24	ŀ Me\	for the	width of X	(4260).
	Y(A	260) REFERE	NCE	:c		
	7(4	200) INLI LINE	.ivcL			
ABLIKIM 15Q PR D92 HAN 15 PR D92 ABLIKIM 14 PRL 11: SHEN 14 PR D89	8 092001 9 012008 9 012011 2 092001 9 072015	M. Ablikim et M. Ablikim et Y.L. Han et al M. Ablikim et C.P. Shen et a	al. al. l.		(BES (BEL (BES (BEL	III Collab.) III Collab.) LE Collab.) III Collab.) LE Collab.)

ABLIKIM	17B	PRL 118 092001	M. Ablikim et al.	(BES III Collab.)
ABLIKIM	15Q	PR D92 012008	M. Ablikim <i>et al.</i>	(BES III Collab.)
HAN	15	PR D92 012011	Y.L. Han <i>et al.</i>	(BELLE Collab.)
ABLIKIM	14	PRL 112 092001	M. Ablikim <i>et al.</i>	(BES III Collab.)
SHEN	14	PR D89 072015	C.P. Shen et al.	(BELLE Collab.)
ABLIKIM	13T	PRL 110 252001	M. Ablikim et al.	(BES III Collab.)
LIU	13B	PRL 110 252002	Z.Q. Liu et al.	(BELLE Collab.)
WANG	13B	PR D87 051101	X.L. Wang et al.	(BELLE Collab.)
LEES	12AC	PR D86 051102	J.P. Lees et al.	(BABAR Collab.)
PAKHLOVA	11	PR D83 011101	G. Pakhlova et al.	(BELLE Collab.)
PEDLAR	11	PRL 107 041803	T. Pedlar et al.	(CLEO Collab.)
DEL-AMO-SA	. 10N	PR D82 052004	P. del Amo Sanchez et al.	(BABAR Collab.)
AUBERT	09M	PR D79 092001	B. Aubert et al.	(BABAR Collab.)
CRONIN-HEN	. 09	PR D80 072001	D. Cronin-Hennessy et al.	`(CLEO Collab.)
PAKHLOVA	09	PR D80 091101	G. Pakhlova <i>et al.</i>	(BELLE Collab.)
AUBERT	08S	PR D77 092002	B. Aubert et al.	(BABAR Collab.)

PAKHLOVA PAKHLOVA YUAN AUBERT AUBERT AUBERT PAKHLOVA WANG YUAN AUBERT AU	08H 08 08A 08A 07AK 07BE 07S 07 07 06 06B 06D 06B 06B	PR D78 014032 PR D77 011103 PRL 100 062001 PR D77 011105 PR D76 012008 PR D76 111105 PRL 98 212001 PRL 98 092001 PRL 99 142002 PRL 99 182004 PR D73 011101 PR D73 012005 PR D74 091103 PRL 96 162003 PR D74 091104 PRL 95 142001	Z.Q. Liu, X.S. Qin, C.Z. Yuan G. Pakhlova et al. G. Pakhlova et al. C.Z. Yuan et al. B. Aubert et al. B. Aubert et al. B. Aubert et al. C.Pakhlova et al. X.L. Wang et al. C.Z. Yuan et al. B. Aubert et al. T.E. Coan et al. Q. He et al. B. Aubert et al.	(BELLE Collab.) (BELLE Collab.) (BELLE Collab.) (BABAR Collab.) (BABAR Collab.) (BABAR Collab.) (BELLE Collab.) (BELLE Collab.) (BELLE Collab.) (BELLE Collab.) (BABAR Collab.) (BABAR Collab.) (BABAR Collab.) (CLEO Collab.) (CLEO Collab.) (BABAR Collab.)
--	--	--	--	---