$X(3940)$

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

OMITTED FROM SUMMARY TABLE

Reported by ABE 07, observed in $e^+e^- \to J/\psi X$.

$X(3940)$ MASS

VALUE (MeV)	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
$3942^{+\ 7}_{-\ 6} \pm 6$	52	PAKHLOV	08	BELL	$e^+e^- \to J/\psi X$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
$3943 \pm 6 \pm 6$	25	[1] ABE	07	BELL	$e^+e^- \to J/\psi X$
3936 ± 14	266	[2] ABE	07	BELL	$e^+e^- \to J/\psi(c\overline{c})$

[1] From a fit to $D^{*+}D^-$ and $D^{*0}\overline{D}^0$ events.
[2] From the inclusive fit. Not independent of the exclusive measurement by ABE 07.

$X(3940)$ WIDTH

VALUE (MeV)	*CL%*	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
$37^{+26}_{-15} \pm 8$		52	PAKHLOV	08	BELL	$e^+e^- \to J/\psi X$
• • • We do not use the following data for averages, fits, limits, etc. • • •						
<52	90	25	ABE	07	BELL	$e^+e^- \to J/\psi X$

$X(3940)$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	$D\overline{D}^* +$ c.c.	seen
Γ_2	$D\overline{D}$	not seen
Γ_3	$J/\psi\omega$	not seen

$X(3940)$ BRANCHING RATIOS

$\Gamma(D\overline{D}^* + \text{c.c.})/\Gamma_{\text{total}}$ **Γ_1/Γ**

VALUE	*CL%*	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
• • • We do not use the following data for averages, fits, limits, etc. • • •						
>0.45	90	25	[3,4] ABE	07	BELL	$e^+e^- \to J/\psi X$

[3] For $X(3940)$ decaying to final states with more than two tracks.
[4] PAKHLOV 08 finds that the inclusive peak near 3940 MeV/c^2 may consist of several states.

$\Gamma(D\overline{D})/\Gamma_{total}$ Γ_2/Γ

VALUE	CL%	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<0.41	90	[5,6] ABE	07 BELL	$e^+e^- \to J/\psi X$

[5] For $X(3940)$ decaying to final states with more than two tracks.
[6] PAKHLOV 08 finds that the inclusive peak near 3940 MeV/c^2 may consist of several states.

$\Gamma(J/\psi\omega)/\Gamma_{total}$ Γ_3/Γ

VALUE	CL%	DOCUMENT ID	TECN	COMMENT
• • • We do not use the following data for averages, fits, limits, etc. • • •				
<0.26	90	[7,8] ABE	07 BELL	$e^+e^- \to J/\psi X$

[7] For $X(3940)$ decaying to final states with more than two tracks.
[8] PAKHLOV 08 finds that the inclusive peak near 3940 MeV/c^2 may consist of several states.

$X(3940)$ REFERENCES

PAKHLOV	08	PRL 100 202001	P. Pakhlov *et al.*	(BELLE Collab.)
ABE	07	PRL 98 082001	K. Abe *et al.*	(BELLE Collab.)

OTHER RELATED PAPERS

BUISSERET	07	PR C76 025206	F. Buisseret