\( X(3940) \)

\[ G(J^PC) = ??(??) \]

Omitted from summary table

Reported by ABE 07, observed in \( e^+ e^- \rightarrow J/\psi X \).

### \( X(3940) \) Mass

<table>
<thead>
<tr>
<th>Value (MeV)</th>
<th>EVTS</th>
<th>Document ID</th>
<th>TECN</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>3942 ± 7/6 ± 6</td>
<td>52</td>
<td>PAKHLOV 08 BELL</td>
<td>( e^+ e^- \rightarrow J/\psi X )</td>
<td></td>
</tr>
</tbody>
</table>

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

3943 ± 6 ± 6 | 25 | 1 ABE 07 BELL | \( e^+ e^- \rightarrow J/\psi X \) |

3936 ± 14 | 266 | 2 ABE 07 BELL | \( e^+ e^- \rightarrow J/\psi (c \tau) \) |

\*\*\* From a fit to \( D^+ D^- \) and \( D^{*0} \bar{D}^0 \) events. \*\*\*

2 From the inclusive fit. Not independent of the exclusive measurement by ABE 07.

### \( X(3940) \) Width

<table>
<thead>
<tr>
<th>Value (MeV)</th>
<th>CL%</th>
<th>EVTS</th>
<th>Document ID</th>
<th>TECN</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>37 + 26 ( -15 \pm 8 )</td>
<td>52</td>
<td>PAKHLOV 08 BELL</td>
<td>( e^+ e^- \rightarrow J/\psi X )</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

\(<52 \) | 90 | 25 | ABE 07 BELL | \( e^+ e^- \rightarrow J/\psi X \) |

### \( X(3940) \) Decay Modes

<table>
<thead>
<tr>
<th>Mode</th>
<th>Fraction ((\Gamma_i/\Gamma))</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \Gamma_1 )</td>
<td>( D \bar{D}^* + \text{c.c.} ) seen</td>
</tr>
<tr>
<td>( \Gamma_2 )</td>
<td>( D \bar{D} ) not seen</td>
</tr>
<tr>
<td>( \Gamma_3 )</td>
<td>( J/\psi \omega ) not seen</td>
</tr>
</tbody>
</table>

### \( X(3940) \) Branching Ratios

\( \Gamma(D\bar{D}^* + \text{c.c.})/\Gamma_{\text{total}} \)

<table>
<thead>
<tr>
<th>Value</th>
<th>CL%</th>
<th>EVTS</th>
<th>Document ID</th>
<th>TECN</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>( &gt;0.45 )</td>
<td>90</td>
<td>25</td>
<td>3, 4 ABE 07 BELL</td>
<td>( e^+ e^- \rightarrow J/\psi X )</td>
<td></td>
</tr>
</tbody>
</table>

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

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.
\[
\frac{\Gamma(D\bar{D})}{\Gamma_{\text{total}}} \quad \frac{\Gamma_2}{\Gamma} \\
\begin{array}{cccccc}
\text{VALUE} & CL\% & \text{DOCUMENT ID} & \text{TECN} & \text{COMMENT} \\
<0.41 & 90 & 5,6 & \text{ABE} & 07 & \text{BELL e}^+ e^- \rightarrow J/\psi X \\
\end{array}
\]

For \(X(3940)\) decaying to final states with more than two tracks.

\[
\frac{\Gamma(J/\psi \omega)}{\Gamma_{\text{total}}} \quad \frac{\Gamma_3}{\Gamma} \\
\begin{array}{cccccc}
\text{VALUE} & CL\% & \text{DOCUMENT ID} & \text{TECN} & \text{COMMENT} \\
<0.26 & 90 & 7,8 & \text{ABE} & 07 & \text{BELL e}^+ e^- \rightarrow J/\psi X \\
\end{array}
\]

For \(X(3940)\) decaying to final states with more than two tracks.

PAKHLOV 08 finds that the inclusive peak near 3940 MeV/c^2 may consist of several states.

\[
X(3940) \text{ REFERENCES} \\
\begin{array}{llll}
\text{PAKHLOV} & 08 & \text{PRL 100 202001} & \text{P. Pakhlov et al. (BELLE Collab.)} \\
\text{ABE} & 07 & \text{PRL 98 082001} & \text{K. Abe et al. (BELLE Collab.)} \\
\end{array}
\]