\(D_{s2}(2573)\pm\)  

\[ I(J^P) = 0(?) \]

\(J^P\) is natural, width and decay modes consistent with \(2^+\).

### \(D_{s2}(2573)\pm\) MASS

<table>
<thead>
<tr>
<th>VALUE (MeV)</th>
<th>EVTS</th>
<th>DOCUMENT ID</th>
<th>TECN</th>
<th>CHG</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2572.4 ± 1.5 OUR AVERAGE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2568.6 ± 3.2</td>
<td>64</td>
<td>1 HEISTER 02b ALEP</td>
<td></td>
<td></td>
<td>(e^+ e^- \rightarrow D^0 K^+ X)</td>
</tr>
<tr>
<td>2574.5 ± 3.3 ± 1.6</td>
<td></td>
<td>ALBRECHT 96 ARG</td>
<td></td>
<td></td>
<td>(e^+ e^- \rightarrow D^0 K^+ X)</td>
</tr>
<tr>
<td>2573.2 ± 1.7 ± 0.9</td>
<td>217</td>
<td>KUBOTA 94 CLE2</td>
<td></td>
<td>+</td>
<td>(e^+ e^- \sim 10.5) GeV</td>
</tr>
</tbody>
</table>

\(^1\) Calculated using \(m_{D^0} = 1864.5 \pm 0.5\) and the mass difference below.

### \(m_{D_{s2}(2573)\pm} - m_{D^0}\)

<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>704 ± 3 ± 1</td>
<td>64</td>
<td>1 HEISTER 02b ALEP</td>
<td></td>
<td>(e^+ e^- \rightarrow D^0 K^+ X)</td>
</tr>
</tbody>
</table>

### \(D_{s2}(2573)\pm\) WIDTH

<table>
<thead>
<tr>
<th>VALUE (MeV)</th>
<th>EVTS</th>
<th>DOCUMENT ID</th>
<th>TECN</th>
<th>CHG</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 ± 5 (-) 4 OUR AVERAGE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.4 ± 8.3 ± 3.0</td>
<td></td>
<td>ALBRECHT 96 ARG</td>
<td></td>
<td></td>
<td>(e^+ e^- \rightarrow D^0 K^+ X)</td>
</tr>
<tr>
<td>16 ± 5 (-) 4 ± 3</td>
<td>217</td>
<td>KUBOTA 94 CLE2</td>
<td></td>
<td>+</td>
<td>(e^+ e^- \sim 10.5) GeV</td>
</tr>
</tbody>
</table>

### \(D_{s2}(2573)\pm\) DECAY MODES

\(D_{s2}(2573)\)\(^-\) modes are charge conjugates of the modes below.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Fraction ((\Gamma_i/\Gamma))</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\Gamma_1)</td>
<td>(D^0 K^+) seen</td>
</tr>
<tr>
<td>(\Gamma_2)</td>
<td>(D^*(2007)^0 K^+) not seen</td>
</tr>
</tbody>
</table>

### \(D_{s2}(2573)\pm\) BRANCHING RATIOS

\[ \Gamma(D^0 K^+)/\Gamma_{\text{total}} \]

<table>
<thead>
<tr>
<th>VALUE</th>
<th>EVTS</th>
<th>DOCUMENT ID</th>
<th>TECN</th>
<th>CHG</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>seen</td>
<td>217</td>
<td>KUBOTA 94 CLE2</td>
<td></td>
<td>+</td>
<td>(e^+ e^- \sim 10.5) GeV</td>
</tr>
</tbody>
</table>

\[ \Gamma(D^*(2007)^0 K^+)/\Gamma(D^0 K^+) \]

<table>
<thead>
<tr>
<th>VALUE</th>
<th>CL%</th>
<th>DOCUMENT ID</th>
<th>TECN</th>
<th>CHG</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;0.33</td>
<td>90</td>
<td>KUBOTA 94 CLE2</td>
<td></td>
<td>+</td>
<td>(e^+ e^- \sim 10.5) GeV</td>
</tr>
</tbody>
</table>

Citation: S. Eidelman et al. (Particle Data Group), Phys. Lett. B 592, 1 (2004) (URL: http://pdg.lbl.gov)
### $D_{s2}(2573)^\pm$ REFERENCES

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Journal</th>
<th>Volume</th>
<th>Pages</th>
<th>Collaboration</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEISTER 02B PL</td>
<td>26</td>
<td>34</td>
<td></td>
<td></td>
<td>(ALEPH Collab.)</td>
</tr>
<tr>
<td>ALBRECHT 96 ZPHY</td>
<td>69</td>
<td>405</td>
<td></td>
<td></td>
<td>(ARGUS Collab.)</td>
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<tr>
<td>KUBOTA 94 PRL</td>
<td>72</td>
<td>1972</td>
<td></td>
<td></td>
<td>(CLEO Collab.)</td>
</tr>
<tr>
<td>SEMENOV 99 SPU</td>
<td>42</td>
<td>847</td>
<td></td>
<td></td>
<td>Translated from UFN 42 937.</td>
</tr>
</tbody>
</table>

### OTHER RELATED PAPERS

- S.V. Semenov
  - Translated from UFN 42 937.