\[ \Lambda_c(2765)^+ \quad \text{or} \quad \Sigma_c(2765) \]

The quantum numbers were not measured. Status: * OMITTED FROM SUMMARY TABLE

A broad, statistically significant peak (997\,^{+141}_{-129} events) seen in \( \Lambda_c^+ \pi^+ \pi^- \). However, nothing at all is known about its quantum numbers, including whether it is a \( \Lambda_c^+ \) or a \( \Sigma_c \), or whether the width might be due to overlapping states.

### \( \Lambda_c(2765)^+ \) MASS

The mass is obtained from the \( \Lambda_c(2765)^+ - \Lambda_c^+ \) mass-difference measurement below.

<table>
<thead>
<tr>
<th>VALUE (MeV)</th>
<th>DOCUMENT ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>2766.6\pm2.4</td>
<td>OUR FIT</td>
</tr>
</tbody>
</table>

### \( \Lambda_c(2765)^+ - \Lambda_c^+ \) MASS DIFFERENCE

<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>480.1,^{+141}_{-129}</td>
<td>997,^{+141}_{-129}</td>
<td>ARTUSO 01</td>
<td>CLE2</td>
<td>( e^+ e^- \approx \Upsilon(4S) )</td>
</tr>
</tbody>
</table>

### \( \Lambda_c(2765)^+ \) WIDTH

<table>
<thead>
<tr>
<th>VALUE (MeV)</th>
<th>DOCUMENT ID</th>
<th>TECN</th>
<th>COMMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>ARTUSO 01</td>
<td>CLE2</td>
<td>( e^+ e^- \approx \Upsilon(4S) )</td>
</tr>
</tbody>
</table>

### \( \Lambda_c(2765)^+ \) DECAY MODES

<table>
<thead>
<tr>
<th>Mode</th>
<th>Fraction ( \Gamma_i/\Gamma )</th>
</tr>
</thead>
</table>
| \( \Gamma_1 \) | \( \Lambda_c^+ \pi^+ \pi^- \) |}

### \( \Lambda_c(2765)^+ \) REFERENCES

| ARTUSO 01 | PRL 86 4479 | M. Artuso et al. (CLEO Collab.) |

Citation: K.A. Olive et al. (Particle Data Group), Chin. Phys. C38, 090001 (2014) (URL: http://pdg.lbl.gov)