

**$\Sigma_c(2800)$**

$I(J^P) = 1(?^?)$  Status: \*\*\*

Seen in the  $\Lambda_c^+ \pi^+$ ,  $\Lambda_c^+ \pi^0$ , and  $\Lambda_c^+ \pi^-$  mass spectra.

### $\Sigma_c(2800)$ MASSES

The masses are obtained from the mass-difference measurements that follow.

#### $\Sigma_c(2800)^{++}$ MASS

VALUE DOCUMENT ID

**2801<sup>+4</sup><sub>-6</sub> OUR FIT**

#### $\Sigma_c(2800)^+$ MASS

VALUE DOCUMENT ID

**2792<sup>+14</sup><sub>-5</sub> OUR FIT**

#### $\Sigma_c(2800)^0$ MASS

VALUE DOCUMENT ID

**2802<sup>+4</sup><sub>-7</sub> OUR FIT**

### $\Sigma_c(2800)$ MASS DIFFERENCES

#### $m_{\Sigma_c(2800)^{++}} - m_{\Lambda_c^+}$

VALUE EVTS DOCUMENT ID TECN COMMENT

**514<sup>+4</sup><sub>-6</sub> OUR FIT**

**514.5<sup>+3.4+2.8</sup><sub>-3.1-4.9</sub>** 2810 MIZUK 05 BELL  $e^+ e^- \approx \gamma(4S)$

#### $m_{\Sigma_c(2800)^+} - m_{\Lambda_c^+}$

VALUE EVTS DOCUMENT ID TECN COMMENT

**505<sup>+14</sup><sub>-5</sub> OUR FIT**

**505.4<sup>+5.8+12.4</sup><sub>-4.6-2.0</sub>** 1540 MIZUK 05 BELL  $e^+ e^- \approx \gamma(4S)$

#### $m_{\Sigma_c(2800)^0} - m_{\Lambda_c^+}$

VALUE EVTS DOCUMENT ID TECN COMMENT

**515<sup>+4</sup><sub>-7</sub> OUR FIT**

**515.4<sup>+3.2+2.1</sup><sub>-3.1-6.0</sub>** 2240 MIZUK 05 BELL  $e^+ e^- \approx \gamma(4S)$

### $\Sigma_c(2800)$ WIDTHS

#### $\Sigma_c(2800)^{++}$ WIDTH

<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
$75^{+18+12}_{-13-11}$	2810	MIZUK	05 BELL	$e^+ e^- \approx \gamma(4S)$

#### $\Sigma_c(2800)^+$ WIDTH

<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
$62^{+37+52}_{-23-38}$	1540	MIZUK	05 BELL	$e^+ e^- \approx \gamma(4S)$

#### $\Sigma_c(2800)^0$ WIDTH

<u>VALUE</u>	<u>EVTS</u>	<u>DOCUMENT ID</u>	<u>TECN</u>	<u>COMMENT</u>
$61^{+18+22}_{-13-13}$	2240	MIZUK	05 BELL	$e^+ e^- \approx \gamma(4S)$

### $\Sigma_c(2800)$ DECAY MODES

Mode	Fraction ( $\Gamma_i/\Gamma$ )
$\Gamma_1 \Lambda_c^+ \pi$	seen

### $\Sigma_c(2800)$ REFERENCES

MIZUK	05	PRL 94 122002	R. Mizuk <i>et al.</i>	(BELLE Collab.)
-------	----	---------------	------------------------	-----------------