$\Sigma_c(2800)$

$I(J^P) = 1(?^?)$ 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^{+4}_{-6} OUR FIT	

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

VALUE	DOCUMENT ID
2792^{+14}_{-5} OUR FIT	

$\Sigma_c(2800)^{0}$ MASS

VALUE	DOCUMENT ID
2802^{+4}_{-7} OUR FIT	

$\Sigma_c(2800)$ MASS DIFFERENCES

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

VALUE	EVTS	DOCUMENT ID		TECN	COMMENT
$514\ ^{+4}_{-6}$ OUR FIT					
$514.5^{+3.4}_{-3.1}{}^{+2.8}_{-4.9}$	2810	MIZUK	05	BELL	$e^+e^- \approx \Upsilon(4S)$

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

VALUE	EVTS	DOCUMENT ID		TECN	COMMENT
$505\ ^{+14}_{-5}$ OUR FIT					
$505.4^{+\ 5.8}_{-\ 4.6}{}^{+12.4}_{-\ 2.0}$	1540	MIZUK	05	BELL	$e^+e^- \approx \Upsilon(4S)$

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

VALUE	EVTS	DOCUMENT ID		TECN	COMMENT
$515\ ^{+4}_{-7}$ OUR FIT					
$515.4^{+3.2}_{-3.1}{}^{+2.1}_{-6.0}$	2240	MIZUK	05	BELL	$e^+e^- \approx \Upsilon(4S)$

$\Sigma_c(2800)$ WIDTHS

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

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

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

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

$\Sigma_c(2800)^{0}$ WIDTH

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

$\Sigma_c(2800)$ DECAY MODES

	Mode	Fraction (Γ_i/Γ)
Γ_1	$\Lambda_c^+\pi$	seen

$\Sigma_c(2800)$ REFERENCES

MIZUK 05 PRL 94 122002 R. Mizuk *et al.* (BELLE Collab.)