

NODE=B150

$$\Lambda_c(2765)^+$$

or $\Sigma_c(2765)$

$$I(J^P) = ?(??)$$
 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 Λ_c^+ or a Σ_c , or whether the width might be due to overlapping states.

NODE=B150

$\Lambda_c(2765)^+$ MASS

NODE=B150M

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

NODE=B150M

VALUE (MeV)	DOCUMENT ID
2766.6±2.4 OUR FIT	

NODE=B150M

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

NODE=B150D

VALUE (MeV)	EVTs	DOCUMENT ID	TECN	COMMENT
480.1±2.4 OUR FIT				
480.1±2.4	997 ⁺¹⁴¹ ₋₁₂₉	ARTUSO	01	CLE2 e ⁺ e ⁻ ≈ $\Upsilon(4S)$

NODE=B150D

$\Lambda_c(2765)^+$ WIDTH

NODE=B150W

VALUE (MeV)	DOCUMENT ID	TECN	COMMENT
50	ARTUSO	01	CLE2 e ⁺ e ⁻ ≈ $\Upsilon(4S)$

NODE=B150W

$\Lambda_c(2765)^+$ DECAY MODES

NODE=B150220;NODE=B150

Mode	Fraction (Γ_i/Γ)
$\Gamma_1 \Lambda_c^+ \pi^+ \pi^-$	seen

DESIG=1;OUR EST

$\Lambda_c(2765)^+$ REFERENCES

NODE=B150

ARTUSO	01	PRL 86 4479	M. Artuso <i>et al.</i>	(CLEO Collab.)
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REFID=48126