

$\Lambda_c(2940)^+$

$I(J^P) = 0(?^?)$ Status: ***

A fairly narrow peak of good statistical significance first seen in the ρD^0 mass spectrum. It is not seen in ρD^+ , and thus it is probably a Λ_c^+ and not a Σ_c . It is also seen in $\Sigma_c(2455)^{0,++} \pi^\pm$.

$\Lambda_c(2940)^+$ MASS

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
$2939.3^{+1.4}_{-1.5}$ OUR AVERAGE				
$2939.8 \pm 1.3 \pm 1.0$	2280 ± 310	AUBERT	07 BABR	in ρD^0
$2938.0 \pm 1.3^{+2.0}_{-4.0}$	220^{+80}_{-60}	MIZUK	07 BELL	in $\Sigma_c(2455)^{0,++} \pi^\pm$

$\Lambda_c(2940)^+$ WIDTH

VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT
17^{+8}_{-6} OUR AVERAGE				
$17.5 \pm 5.2 \pm 5.9$	2280 ± 310	AUBERT	07 BABR	in ρD^0
$13^{+8}_{-5}^{+27}_{-7}$	220^{+80}_{-60}	MIZUK	07 BELL	in $\Sigma_c(2455)^{0,++} \pi^\pm$

$\Lambda_c(2940)^+$ DECAY MODES

Mode	Fraction (Γ_i/Γ)
Γ_1 ρD^0	seen
Γ_2 $\Sigma_c(2455)^{0,++} \pi^\pm$	seen

$\Lambda_c(2940)^+$ REFERENCES

AUBERT	07	PRL 98 012001	B. Aubert <i>et al.</i>	(BABAR Collab.)
MIZUK	07	PRL 98 262001	R. Mizuk <i>et al.</i>	(BELLE Collab.)