$\Lambda_c(2940)^+$

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

A fairly narrow peak of good statistical significance first seen in the pD^0 mass spectrum. It is not seen in pD^+, 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 pD^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 pD^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	pD^0	seen
Γ_2	$\Sigma_c(2455)^{0,++}\,\pi^\pm$	seen

$\Lambda_c(2940)^+$ REFERENCES

AUBERT	07	PRL 98 012001	B. Aubert *et al.*	(BABAR Collab.)
MIZUK	07	PRL 98 262001	R. Mizuk *et al.*	(BELLE Collab.)