CHARMED BARYONS
$(C=+1)$

$\Lambda_c^+ = u\,d\,c$, $\Sigma_c^{++} = u\,u\,c$, $\Sigma_c^+ = u\,d\,c$, $\Sigma_c^0 = d\,d\,c$,
$\Xi_c^+ = u\,s\,c$, $\Xi_c^0 = d\,s\,c$, $\Omega_c^0 = s\,s\,c$

Λ_c^+

$I(J^P) = 0(\frac{1}{2}^+)$

J not confirmed; $\frac{1}{2}$ is the quark model prediction.

Mass $m = 2285.1 \pm 0.6$ MeV
Mean life $\tau = (0.200^{+0.011}_{-0.010}) \times 10^{-12}$ s
$c\tau = 60.0$ μm

Decay asymmetry parameters

$\Lambda\pi^+$ $\alpha = -1.03 \pm 0.29$
$\Lambda e^+ \nu_e$ $\alpha = -0.89^{+0.19}_{-0.12}$

Λ_c^+ DECAY MODES		Fraction (Γ_i/Γ)	Scale factor/ Confidence level	p (MeV/c)
Hadronic modes with a p and one K				
$p\overline{K}^0$		(2.1 ± 0.4) %		872
$pK^-\pi^+$		(4.4 ± 0.6) %		822
$p\overline{K}^*(892)^0$	[k]	(1.6 ± 0.4) %		681
$\Delta(1232)^{++}K^-$		$(7 \pm 4) \times 10^{-3}$		709
$\Lambda(1520)\pi^+$	[k]	$(3.9^{+2.0}_{-1.7}) \times 10^{-3}$		626
$pK^-\pi^+$ nonresonant		$(2.4^{+0.5}_{-0.6})$ %		822
$p\overline{K}^0\pi^+\pi^-$		(2.4 ± 0.8) %	S=1.3	753
$pK^-\pi^+\pi^0$		seen		758
$pK^*(892)^-\pi^+$		seen		579
$p(K^-\pi^+)_{\text{nonresonant}}\pi^0$		(3.2 ± 0.7) %		758
$\Delta(1232)\overline{K}^*(892)$		seen		417
$pK^-\pi^+\pi^+\pi^-$		$(10 \pm 7) \times 10^{-4}$		670
$pK^-\pi^+\pi^0\pi^0$		$(7.0 \pm 3.5) \times 10^{-3}$		676
$pK^-\pi^+\pi^0\pi^0\pi^0$		$(4.4 \pm 2.8) \times 10^{-3}$		573
Hadronic modes with a p and zero or two K's				
$p\pi^+\pi^-$		$(3.0 \pm 1.6) \times 10^{-3}$		926
$pf_0(980)$	[k]	$(2.4 \pm 1.6) \times 10^{-3}$		621
$p\pi^+\pi^+\pi^-\pi^-$		$(1.6 \pm 1.0) \times 10^{-3}$		851
pK^+K^-		$(3.0 \pm 1.1) \times 10^{-3}$		615
$p\phi$	[k]	$< 1.7 \times 10^{-3}$	CL=90%	589