Ξ^-

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

P is not yet measured; + is the quark model prediction.

Mass $m = 1321.32 \pm 0.13$ MeV
Mean life $\tau = (1.639 \pm 0.015) \times 10^{-10}$ s
$c\tau = 4.91$ cm
Magnetic moment $\mu = -0.6507 \pm 0.0025\ \mu_N$

Decay parameters

$\Lambda\pi^-$	$\alpha = -0.456 \pm 0.014$	(S = 1.8)
"	$\phi = (4 \pm 4)^\circ$	
"	$\gamma = 0.89$ [g]	
"	$\Delta = (188 \pm 8)^\circ$ [g]	
$\Lambda e^-\overline{\nu}_e$	$g_A/g_V = -0.25 \pm 0.05$ [e]	

Ξ^- DECAY MODES		Fraction (Γ_i/Γ)	Confidence level	p (MeV/c)
$\Lambda\pi^-$		(99.887 ± 0.035) %		139
$\Sigma^-\gamma$		(1.27 ± 0.23) × 10^{-4}		118
$\Lambda e^-\overline{\nu}_e$		(5.63 ± 0.31) × 10^{-4}		190
$\Lambda\mu^-\overline{\nu}_\mu$		(3.5 $^{+3.5}_{-2.2}$) × 10^{-4}		163
$\Sigma^0 e^-\overline{\nu}_e$		(8.7 ± 1.7) × 10^{-5}		122
$\Sigma^0\mu^-\overline{\nu}_\mu$		< 8 × 10^{-4}	90%	70
$\Xi^0 e^-\overline{\nu}_e$		< 2.3 × 10^{-3}	90%	6
$\Delta S = 2$ forbidden ($S2$) modes				
$n\pi^-$	$S2$	< 1.9 × 10^{-5}	90%	303
$ne^-\overline{\nu}_e$	$S2$	< 3.2 × 10^{-3}	90%	327
$n\mu^-\overline{\nu}_\mu$	$S2$	< 1.5 %	90%	314
$p\pi^-\pi^-$	$S2$	< 4 × 10^{-4}	90%	223
$p\pi^- e^-\overline{\nu}_e$	$S2$	< 4 × 10^{-4}	90%	304
$p\pi^-\mu^-\overline{\nu}_\mu$	$S2$	< 4 × 10^{-4}	90%	250
$p\mu^-\mu^-$	L	< 4 × 10^{-4}	90%	–

$\Xi(1530)\ P_{13}$

$I(J^P) = \frac{1}{2}(\frac{3}{2}^+)$

$\Xi(1530)^0$ mass $m = 1531.80 \pm 0.32$ MeV (S = 1.3)
$\Xi(1530)^-$ mass $m = 1535.0 \pm 0.6$ MeV
$\Xi(1530)^0$ full width $\Gamma = 9.1 \pm 0.5$ MeV
$\Xi(1530)^-$ full width $\Gamma = 9.9^{+1.7}_{-1.9}$ MeV

$\Xi(1530)$ DECAY MODES	Fraction (Γ_i/Γ)	Confidence level	p (MeV/c)
$\Xi\pi$	100 %		152
$\Xi\gamma$	<4 %	90%	200