n

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

Mass $m = 939.56563 \pm 0.00028$ MeV [a]
$= 1.008664904 \pm 0.000000014$ u
$m_n - m_p = 1.293318 \pm 0.000009$ MeV
$= 0.001388434 \pm 0.000000009$ u
Mean life $\tau = 887.0 \pm 2.0$ s (S = 1.3)
$c\tau = 2.659 \times 10^8$ km
Magnetic moment $\mu = -1.9130428 \pm 0.0000005\ \mu_N$
Electric dipole moment $d < 11 \times 10^{-26}\ e$cm, CL = 95%
Electric polarizability $\alpha = (1.16^{+0.19}_{-0.23}) \times 10^{-3}$ fm^3
Charge $q = (-0.4 \pm 1.1) \times 10^{-21}\ e$
Mean time for $n\overline{n}$ oscillations $> 1.2 \times 10^8$ s, CL = 90% [d]

Decay parameters [e]

$p e^- \overline{\nu}_e$	$g_A/g_V = -1.2573 \pm 0.0028$
"	$A = -0.1127 \pm 0.0011$
"	$B = 0.997 \pm 0.028$
"	$a = -0.102 \pm 0.005$
"	$\phi_{AV} = (180.07 \pm 0.18)^\circ$ [f]
"	$D = (-0.5 \pm 1.4) \times 10^{-3}$

n DECAY MODES	Fraction (Γ_i/Γ)	Confidence level	p (MeV/c)
$p e^- \overline{\nu}_e$	100 %		1.19
Charge conservation (Q) violating mode			
$p \nu_e \overline{\nu}_e$	$Q < 9 \times 10^{-24}$	90%	1.29

$N(1440)\ P_{11}$

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

Mass $m = 1430$ to 1470 (≈ 1440) MeV
Full width $\Gamma = 250$ to 450 (≈ 350) MeV

The following branching fractions are our estimates, not fits or averages.

$N(1440)$ DECAY MODES	Fraction (Γ_i/Γ)	p (MeV/c)
$N\pi$	60–70 %	397
$N\pi\pi$	30–40 %	342
$\Delta\pi$	20–30 %	143
$N\rho$	<8 %	†
$N(\pi\pi)^{I=0}_{S\text{-wave}}$	5–10 %	–
$p\gamma$	0.04–0.07 %	414
$n\gamma$	0.001–0.05 %	413