

Table 14.15 from (1981AJ01): Excited states of ^{14}N from $^{12}\text{C}(^3\text{He}, p)^{14}\text{N}^a$

E_x (MeV \pm keV)		L^i	$J\pi; T$
(1971DU03)	(1969HO23)		
	0	2	
	2.319 ± 15	0	
3.9502 ± 1.5	3.952 ± 15	0	
4.9153 ± 1.4	4.927 ± 15	1	
$\equiv 5.10587 \pm 0.18^b$	5.117 ± 15	1	
5.6888 ± 1.4	5.713 ± 15	1	
5.8324 ± 1.4	5.885 ± 15	3	
6.2025 ± 1.4	6.224 ± 15	0	
6.4449 ± 1.4	6.468 ± 15	2	
7.0279 ± 1.4	7.036 ± 15	2	
7.9649 ± 1.4	7.974 ± 15	3	
	8.072 ± 15	1	
8.4864 ± 1.5^c	8.493 ± 15	3	$4^-; 0^{e,i}$
8.6174 ± 4	8.625 ± 15	0	$(0^+; 1)^k$
8.9099 ± 1.9^d	8.912 ± 15		$(3^-; 1)^k$
8.9598 ± 1.4			
	8.97 ± 15		
8.9773 ± 4			$(2^+; 0)^k$
9.1241 ± 1.5	9.126 ± 15		n
9.1674 ± 1.4	9.176 ± 15	j	$(2^+; 1)^k$
9.3854 ± 1.6^d	9.389 ± 15		$2^-; 0^{i,l}$
	9.51^e		$(2^-; 1)^k$
	9.703 ± 15		$(1^+; 0)^k$
	10.063 ± 15^f		$3^+, \geq 4^e$
	10.101 ± 15		$1^+; 2^+^e$
	10.23^e		1^e
	10.441 ± 15	j	$(2^+; 1)^k$
	10.56^e		$1, 2^e$
	10.812 ± 15		$5^+; 0^{e,m}$
	11.053 ± 15		

Table 14.15 from (1981AJ01): Excited states of ^{14}N from $^{12}\text{C}(^3\text{He}, \text{p})^{14}\text{N}$ ^a (continued)

E_x (MeV \pm keV)		L ⁱ	$J^\pi; T$
(1971DU03)	(1969HO23)		
	11.249 \pm 15		
	11.357 \pm 15		
	11.517 \pm 15		
	g		
	12.29 \pm 15		
	12.425 \pm 15		
	12.506 \pm 15		
	12.608 \pm 15		
	12.69 \pm 15		
	12.80 \pm 15		
	12.90 \pm 25 ^h		
	13.15 \pm 40		
	14.91 \pm 60		
	15.8 \pm 200		
	17.4 \pm 200		

^a See also Tables 14.14 in (1970AJ04) and 14.18 in (1976AJ04).

^b All E_x shown by (1971DU03) are measured relative to this energy obtained by (1967CH19) from E_γ .

^c $\Gamma_p/\Gamma = 0.73 \pm 0.10$ (1974NO01).

^d The widths of $^{14}\text{N}^*(8.91, 9.39)$ are, respectively, 19.7 ± 1.9 and 15.6 ± 2.0 keV.

^e (1974NO01): from a study of decay proton correlation ($^{12}\text{C}(^3\text{He}, \text{p}')^{14}\text{N}^*(\text{p})^{13}\text{C}_{\text{g.s.}}$) with the relevant p' group.

^f $\Gamma < 10$ keV (J.W. Noe, private communication).

^g Three states at 11.66 ± 0.04 , 11.79 ± 0.11 , 11.95 ± 0.03 MeV are reported by (1968MA29).

^h This state and the states below are from (1968MA29).

ⁱ (1968MA29).

^j $\theta_p^2(l=3) = (2.3 \pm 1.1) \times 10^{-3}$ and $< 1.6 \times 10^{-3}$ for $^{14}\text{N}^*(9.17, 10.43)$ (1974NO01).

^k Known from other data: consistent with results of (1974NO01).

^l The results of (1974NO01) are consistent with either $J^\pi = 2^-$ or 3^- for this state.

^m (1972NO08): from study of angular correlations. See also (1968MA29).

ⁿ Unresolved doublet; see reactions 22 and 27.