

Table 13.18 from (1976AJ04): Levels of ^{13}C from $^{12}\text{C}(\text{d}, \text{p})^{13}\text{C}$

E_x (MeV \pm keV)			Γ_{cm} (keV)	l_n^b	J^π^b	S
A	(1955MC75)	(1973GO03, 1975TR07)				
0	0			1	$\frac{1}{2}^-$	0.58 ± 0.04^c 1.1 ^d
3.087 ± 5	3.09	3.0884 ± 0.2^g		0	$\frac{1}{2}^+$	0.36 ± 0.02^c 1.1 ^d
3.685 ± 7	3.68	$\equiv 3.6841$		1	$\frac{3}{2}^-$	0.10 ^d
3.855 ± 7	3.85	3.8535 ± 0.2^g		2	$\frac{5}{2}^+$	1.1 ^d
	6.86			2	$\frac{5}{2}^+$	0.04 ^d
	7.470 ± 20					
	7.533 ± 20					
	7.641 ± 20		70 ± 15			
	8.4 ± 300	8.25^f	1100 ± 300	2	$\frac{3}{2}^+$	1.0 ^{d,e}
		8.86^f		1	$\frac{1}{2}^-$	0.5 ^{d,e}
	9.500 ± 20			(1)	$(\frac{3}{2}^-)$	
	9.897 ± 20			1	$\frac{3}{2}^-$	0.1 ^{d,e}
	10.759 ± 20	10.755 ± 5	56 ± 2			
		10.818 ± 5	24 ± 3			
		10.997 ± 8	82 ± 15			
		11.080 ± 5	< 8			
		11.748 ± 10	107 ± 14			
		11.851 ± 5	68 ± 4			
		11.97 ± 40^a	≈ 260			
		12.108 ± 5	81 ± 8			

A: (1951ST19, 1951VA1A, 1954SP01).

^a May correspond to unresolved states.

^b See (1970AJ04, 1973DA17).

^c (1972PE11).

^d (1973DA17) [HD parameters]. See also (1974GM01, 1975HU01) and Table 13.14 in (1970AJ04).

^e $\Gamma_{\text{d,p}}/\Gamma_n = 0.68, 0.91$ and 2.2 for $^{13}\text{C}^*(8.25, 8.86, 9.90)$, respectively (1973DA17).

^f Nominal energies (1973DA17).

^g From E_γ measurements: E_x relative to adopted energy of $^{13}\text{C}^*(3.68)$ (Table 13.4) (1975TR07).