

Table 13.10 from (1970AJ04): Resonances in $^{12}\text{C}(n, n)^{12}\text{C}$ ^a

E_{res} (MeV \pm keV)	Γ_{cm} (keV)	$^{13}\text{C}^*$ (MeV)	l_n	J^π	θ^2	Refs. ^a
		3.09			0.20 ± 0.02	(1963SE13)
2.077 ± 3	6	6.864	2	$\frac{5}{2}^+$		(1961LA1A, 1963PI03, 1968DA1F)
2.82	≈ 5	7.55				(1968CI1A, 1968SC1G)
2.95	80	7.67	2	$\frac{3}{2}^+$		(1958WI36)
3.58 ± 80	1000 ± 100	8.25	2	$\frac{3}{2}^+$	0.35	(1960TS02, 1961FO07, 1966LI03, 1969GA1U)
4.26 ± 30	185 ± 40	8.88	1	$\frac{1}{2}^-$	0.03	(1960TS02, 1961FO07, 1966LI03, 1969GA1U)
4.935 ± 4	≤ 5 ^e	9.499	1	$(\frac{1}{2}, \frac{3}{2})^-$		(1960TS02, 1961FO07, 1969DA13, 1969GA1U)
5.368 ± 5	28 ^{b,e}	9.899	1	$\frac{3}{2}^-$		(1961FO07, 1968GA1L, 1969DA13, 1969GA1U)
6.294 ± 5	60 ^{b,e}	10.753	3	$\frac{7}{2}^-$		(1961FO07, 1968GA1L, 1969DA13, 1969GA1U)
6.5 ^b		10.9				(1961FO07)
6.559 ^b	37 ^e	11.03	(0)	$(\frac{1}{2}^+)$		(1961FO07 ^c , 1968GA1L, 1969GA1U)
6.7		11.1				(1961FO07)
(7.4)	(250)	(11.8)		$(\geq \frac{5}{2})$		(1961FO07)
7.759 ± 8	(200)	12.104		$(\geq \frac{7}{2})$		(1961FO07, 1969DA13)
(8.1)	(150)	(12.4)				(1961FO07)
9.3	370	13.5				(1961FO07)
11.1	450	15.2		$(\geq \frac{3}{2})$		(1961FO07)
12.1	230	16.1				(1961FO07)
15.8 ^d	≈ 460	19.5	1	$(\frac{1}{2}, \frac{3}{2})^-$		(1968BO34)
19.6 ± 0.2	≈ 1000	23.0	1	$(\frac{1}{2}, \frac{3}{2})^-$		(1964HA1G, 1965HA21, 1968BO34)

^a See (1959AJ76) for earlier references; see also (1964ST25).

^b See (1961FO07).

^c I am indebted to J.C. davis and H.H. Barschall for sending me this revised value based on a change in the calibration of the analyzing magnet used by (1961FO07).

^d Resonance in elastic scattering: see also Table 13.13.

^e (1968CI1A): see (1969GA1U).