

Table 13.10 from (1986AJ01): Resonances in $^{12}\text{C}(n, n)^{12}\text{C}$ ^a

E_{res} (MeV \pm keV)	$\Gamma_{\text{c.m.}}$ (keV)	$^{13}\text{C}^*$ (MeV)	J^π	Γ_n/Γ
2.079 \pm 3	6	6.864	$\frac{5}{2}^+$	
2.819 \pm 3	1.2 \pm 0.3	7.546		
2.94 \pm 10	124 \pm 7	7.66	$\frac{3}{2}^+$	
3.472 \pm 15	1000 \pm 50	8.149	$\frac{3}{2}^+$	
4.259 \pm 15	210 \pm 15	8.874	$\frac{1}{2}^-$	1.00
4.93707 \pm 0.07 ^b	1.9 \pm 0.15 ^b	9.4997	$(\frac{9}{2}^+)^c$	1.00
5.368 \pm 5	26 \pm 3	9.897	$\frac{3}{2}^-$	0.70 \pm 0.10
6.294 \pm 5	53 \pm 4	10.751	$\frac{7}{2}^-^c$	0.70 \pm 0.10
6.5		10.9		
6.558 \pm 8	37 \pm 4	10.994	$(\frac{1}{2}^+)$	0.40 \pm 0.10
6.7		11.1		
7.35 \pm 50 ^d	129 \pm 40	11.72	$\frac{3}{2}^-$	0.80 \pm 0.08
7.62 \pm 90 ^d	494 \pm 80	11.97	$\frac{5}{2}^+$	0.51 \pm 0.06
7.78 \pm 80 ^d	538 \pm 65	12.12	$\frac{3}{2}^+$	0.28 \pm 0.05
7.79 \pm 50 ^d	77 \pm 30	12.13	$\frac{5}{2}^-$	0.43 \pm 0.06
7.80 \pm 70 ^d	426 \pm 70	12.14	$\frac{1}{2}^+$	0.50 \pm 0.07
7.94 \pm 70 ^d	186 \pm 50	12.27	$\frac{3}{2}^-$	0.73 \pm 0.08
8.12 \pm 50 ^d	114 \pm 40	12.43	$\frac{7}{2}^-$	0.42 \pm 0.06
9.35	619 \pm 50	13.57	$\frac{7}{2}^-$	0.18 \pm 0.03
9.96		14.13	$\frac{3}{2}^-$	
10.88	450	14.98	$\frac{7}{2}^-$	
11.20		15.27	$\frac{9}{2}^+$	
11.40		15.46	$\frac{3}{2}^-$	
12.1	230	16.1	$(\frac{5}{2}^- + \frac{7}{2}^+)$	
15.8	\approx 460	19.5	$(\frac{1}{2}, \frac{3}{2})^-$	
19.6 \pm 200	\approx 1000	23.0		

^a For earlier references and additional information see [Tables 13.10 in \(1970AJ04\)](#), [13.16 in \(1976AJ04\)](#) and [13.12 in \(1981AJ01\)](#). See the discussion in [\(1985TO02\)](#). See also [\(1982KN02\)](#) for an R -matrix analysis to $E_n \approx 9$ MeV.

^b Derived from a lorentzian probability plot [\(1980CI03\)](#).

^c See [\(1982KN02\)](#).

^d [\(1983TO19\)](#).