

Table 15.21 from (1976AJ04): Resonances in $^{12}\text{C} + {}^3\text{He}$

$E({}^3\text{He})$ (MeV \pm keV)	Resonant for	$\Gamma_{\text{c.m.}}$ (keV)	J^π	E_x (MeV)	Refs.
1.21	p_0, p_2		$(\frac{5}{2})^-$	13.04	(1957BR18)
1.3	$p_0 \rightarrow p_3$			13.1	(1957BR18)
2.15	n, p_0		$(> \frac{5}{2})$	13.79	(1957BR18)
$2.45 \pm 40^{\text{a}}$	$n_0, p_0 \rightarrow p_3$	160 ± 20	$(\frac{1}{2}^-, \frac{3}{2}^-)$	14.03	A
$2.75 \pm 40^{\text{a}}$	$n_0, p_1, p_2, {}^3\text{He}, \alpha_0$	340 ± 30	$\frac{1}{2}^+$	14.27	A, (1971JA01)
(2.87)	p_0, p_2	240		(14.37)	(1973SC1U)
$2.990 \pm 10^{\text{a}}$	$n_0, p_0, p_1, p_2, p_4, p_5, p_8, {}^3\text{He}, \alpha_0$	100 ± 10	$\frac{3}{2}^+, \frac{5}{2}^+$	14.465	A, (1971JA01)
$3.28 \pm 40^{\text{a}}$	$p_0, (p_1, p_2)$	180 ± 40		14.70	(1964KU05)
3.60 ± 40	p_0, p_1, p_2	400 ± 25		14.95	(1958JO20, 1964KU05)
4.20 ± 10	p_5, p_6, α_0	65 ± 15		15.43	(1964KU05)
4.37 ± 40	$p_0, p_1, p_2, p_4, p_7, p_8, \alpha_0$	80 ± 25		15.57	A ^d
4.65 ± 50	n_0			15.79	A
4.78 ± 50	${}^3\text{He}, \alpha_0$	350	$\frac{1}{2}^-, \frac{3}{2}^-$	15.90	(1969WE03)
4.97 ± 20	α_0			16.05	(1969WE08)
5.03 ± 20	$n_0, {}^3\text{He}, \alpha_0$			16.10	A, (1969WE08)
5.15 ± 20	$n_0, {}^3\text{He}, \alpha_0$			16.19	A, (1969WE08)
5.45 ± 50	${}^3\text{He}, \alpha_0$	170	$\frac{1}{2}^+$	16.43	(1969WE03)
5.85 ± 50	$n_0, {}^3\text{He}$			16.75	(1964OS01, 1966SC12)
6.80 ± 50	$n_0, {}^3\text{He}, \alpha_0$	600	$\frac{1}{2}^-, \frac{3}{2}^-$	17.51	(1964OS01, 1969WE03)
7.40 ± 50	${}^3\text{He}$	200	$\frac{1}{2}^-, \frac{3}{2}^-$	17.99	(1969WE03)
7.70 ± 50	n_0, p_0			18.23	(1964OS01, 1973SO04)
8.70 ± 50	n_0			19.03	(1964OS01)
9.80 ± 50	n_0			19.91	(1964OS01)
(10.5)	p_0			(20.5)	(1973SO04)
(17.0) ^b	${}^3\text{He}$	≈ 600	$(\frac{13}{2}^-)$	(26.0)	(1968FO06, 1972MC01)
(20.0) ^c	${}^3\text{He}$	≈ 2500	$(\frac{9}{2}^-, \frac{11}{2}^-)$	(28.0)	(1972MC01)
(21.5)	${}^3\text{He}$ to $^{12}\text{C}^*(15.1)$	≈ 2500		(29.0)	(1970SI16)

A: See references listed in Table 15.21 (1970AJ04) for this state.

^a See also (1973SC1U).

^b $\Gamma_p = 0.06$ MeV (1972MC01).

^c $\Gamma_p \geq 0.1$ MeV (1972MC01).

^d Omit (1969WE03).