

Table 15.23 from (1976AJ04):
Levels of ^{15}O from $^{13}\text{C}(^3\text{He}, n)^{15}\text{O}$

| E_x^a (MeV) | $J\pi^b$ | L^c | L^d | S^e |
|--------------------|--------------------------------|----------------|----------|-------------------|
| g.s. | $\frac{1}{2}^-$ | 0 | 0 | 1 ^g |
| 5.18 ^f | $\frac{1}{2}^+$ | 1 | 1 | 0.15 |
| 5.24 ^f | $\frac{5}{2}^+$ | 3 | 3 | 0.17 |
| 6.18 | $\frac{3}{2}^-$ | 2 | 2 | 0.10 ^h |
| 6.79 ^f | $\frac{3}{2}^+$ | 1 | 1 | 0.12 |
| 6.86 ^f | $\frac{5}{2}^+$ | 3 | 3 | 0.29 |
| 7.28 | $\frac{7}{2}^+$ | 3 | 3 | (< 0.03) |
| 7.56 | $\frac{1}{2}^+$ | 1 | 1 | 0.02 |
| 8.28 | $\frac{3}{2}^+$ | 1 | 1 | (0.38) |
| 8.74 | $\frac{1}{2}^+$ | 1 | 1 | |
| 8.92 ^l | | 1 | | 0.55 ⁱ |
| 8.98 | $(\frac{1}{2})^-$ | 0 | | 0.44 ^j |
| 9.49 | $\frac{5}{2}^-$ | 2 | | |
| 9.53 | $(\frac{1}{2})^+$ | 1 | | |
| 9.61 | $\frac{3}{2}^-$ | 2 | | 1.05 ^j |
| 9.66 | $(\frac{7}{2}, \frac{9}{2})^-$ | 0 ^k | | |
| 10.29 ^l | | | ≥ 3 | |
| 10.48 ^l | | | 2 | |

^a Nominal energies: see Table 15.18.

^b Known $J\pi$: see Table 15.18.

^c (1971ET1A, 1972ET01): $E(^3\text{He}) = 5.5$ and 6.2 MeV; used codes DWUCK and MANDY. See also (1971HI04, 1971HI1F): $E(^3\text{He}) = 6$ MeV.

^d (1972GE02): $E(^3\text{He}) = 6$ MeV.

^e (1971HI04); see also (1972GE02).

^f These states were unresolved.

^g $(p_{1/2})^2$.

^h $(p_{3/2}, p_{1/2})$.

ⁱ $(p_{1/2}, d_{3/2})$.

^j $(d_{5/2})^2$.

^k (1971HI04) report $L = 4$.

^l Known to be a doublet: see Table 15.19.