

Table 19.4 from (1987AJ02):  
Levels of  $^{19}\text{O}$  from  $^{17}\text{O}(t, p)$  and  $^{18}\text{O}(d, p)$

$E_x$ (MeV $\pm$ keV) <sup>a</sup>	$\Gamma_{\text{c.m.}}$ (keV) <sup>a</sup>	$l_n$ <sup>b</sup>	$L$ <sup>c</sup>	$S$ <sup>d</sup>	$J^\pi$
0		2	0	0.57	$\frac{5}{2}^+$
0.0960 $\pm$ 0.5		2	2		$\frac{3}{2}^+$
1.4719 $\pm$ 0.5		0	2	1.00	$\frac{1}{2}^+$
2.3715 $\pm$ 1.0		2	(2 + 4)		$\frac{9}{2}^+$
2.7790 $\pm$ 0.9		(2)	2		$\frac{7}{2}^+$
3.0671 $\pm$ 2.6			(2 + 4)		$\frac{3}{2}^+$
3.1535 $\pm$ 2.4		2	(0 + 2)	(0.06)	$\frac{5}{2}^+$
3.237 $\pm$ 5		a			$\frac{3}{2}^+$
3.944 $\pm$ 3		1		0.11	$\frac{3}{2}^-$
4.118 $\pm$ 5	< 15	2	(2)	0.03	$\frac{3}{2}^+$
4.333 $\pm$ 12	< 15				
4.402 $\pm$ 12	< 15				
4.584 $\pm$ 12	75 $\pm$ 5	1		0.15	$\frac{3}{2}^-$
4.707 $\pm$ 12	< 15	2	a	0.02	$\frac{5}{2}^+$
4.998 $\pm$ 12	< 15				
5.150 $\pm$ 10	< 15	2	a	0.08	$\frac{5}{2}^+$
5.455 $\pm$ 10	320 $\pm$ 25	2	(2 + 4)	0.85	$\frac{3}{2}^+$
5.502 $\pm$ 12	< 15				
5.714 $\pm$ 12	< 15	2		0.17	$(\frac{3}{2}^+)$
6.280 $\pm$ 12	< 15	3		0.13	$\frac{7}{2}^-$
6.480 $\pm$ 15					
6.560 $\pm$ 15					
6.899 $\pm$ 15					
6.997 $\pm$ 15					
7.117 $\pm$ 15					
7.248 $\pm$ 15					

<sup>a</sup> For references see [Table 19.3 in \(1978AJ03\)](#). However there are a number of errors in that table which have been corrected here. I am grateful to Prof. F.C. Barker for pointing them out.

<sup>b</sup>  $^{18}\text{O}(d, p)^{19}\text{O}$ .

<sup>c</sup>  $^{17}\text{O}(t, p)^{19}\text{O}$ .

<sup>d</sup>  $E_d = 14.8$  MeV: polarization and differential cross section measurements. The spectroscopic factors for the states with  $E_x > 4.1$  MeV have been calculated in the weakly bound approximation: see [\(1978AJ03\)](#).