

Table 13.21 from (1986AJ01): Beta decay of  $^{13}\text{O}$  <sup>a</sup>

Decay to		$E_p$ (c.m.) (MeV) to		Relative intensity	% of all $\beta$ -decays	log $ft$
$^{13}\text{N}^*$ (MeV)	$J^\pi$	$^{12}\text{C}^*(\text{g.s.})$	$^{12}\text{C}^*(4.4)$			
g.s.	$\frac{1}{2}^-$	observed	not seen	100	$88.1 \pm 3.4$ <sup>b</sup>	$4.10 \pm 0.02$ <sup>b</sup>
3.51	$\frac{3}{2}^-$			$5.48 \pm 0.05$	0.33 $\pm$ 0.10	$10.7 \pm 3.1$
7.38	$\frac{5}{2}^-$	observed	2.56 $\pm$ 0.05	3.5 $\pm$ 0.3	$0.40 \pm 0.19$ <sup>d</sup>	$5.22 \pm 0.23$
8.92	$\frac{1}{2}^-$			0.54 $\pm$ 0.16	$4.73 \pm 0.14$	
9.48	$\frac{3}{2}^-$	observed	3.12 $\pm$ 0.05	1.5 $\pm$ 0.3	0.13 $\pm$ 0.04	$5.18 \pm 0.14$
				0.8 $\pm$ 0.1		
10.36	$\frac{5}{2}^-$	observed	3.97 $\pm$ 0.05	0.43 $\pm$ 0.15	0.019 $\pm$ 0.012	$5.8 \pm 0.3$
				0.05 $\pm$ 0.03 <sup>c</sup>		
				0.13 $\pm$ 0.07		

<sup>a</sup> (1970ES03). In addition there is some evidence for weak proton groups with  $E_p = 3.44$  and  $6.28$  MeV ( $\pm 0.05$  MeV).

<sup>b</sup> The ground-state  $ft$  was taken to be 1.15 times that for  $^{13}\text{B}$  (1970ES03).

<sup>c</sup> Calculated value from the known ratio of the elastic and inelastic widths.

<sup>d</sup> Includes a calculated relative intensity of  $(3.4 \pm 1.4)$  to  $^{12}\text{C}^*(4.4)$ . I am indebted to Prof. F.C. Barker for this observation.