

Table 17.11 from (1986AJ04): Decay properties of the lowest  $T = \frac{3}{2}$  states in  $A = 17$  <sup>a</sup>

		<sup>17</sup> O*(11.0787 ± 0.0008) <sup>b</sup>	<sup>17</sup> F*(11.1928 ± 0.0021) <sup>c</sup>
$J^\pi$		$\frac{1}{2}^-$	$\frac{1}{2}^-$
$\Gamma_{\text{c.m.}}$ (keV)		$2.4 \pm 0.3$ <sup>b</sup>	$0.24 \pm 0.04$
Branching ratio (%) to			
<sup>16</sup> O* (MeV)	$J^\pi$		
0	0 <sup>+</sup>	$81 \pm 6$	$9.3 \pm 1.3$
6.05	0 <sup>+</sup>	$5 \pm 2$	$< 3$
6.13	3 <sup>-</sup>		$22 \pm 2$
6.92	2 <sup>+</sup>		$24 \pm 6$
7.12	1 <sup>-</sup>		$44 \pm 4$
<sup>13</sup> C + $\alpha_0$ or <sup>13</sup> N + $\alpha_0$		$7 \pm 1$ <sup>d</sup>	$< 7$
Partial widths [ $\Gamma_p$ or $\Gamma_n$ ] to			
<sup>16</sup> O(0)		$1.88 \pm 0.12$ keV	$19 \pm 3$ eV
<sup>16</sup> O*(6.05)			$< 8$ eV
<sup>16</sup> O*(6.13)		$0.12 \pm 0.05$ keV	$45 \pm 14$ eV <sup>e</sup>
<sup>16</sup> O*(6.92)			$49 \pm 19$ eV <sup>e</sup>
<sup>16</sup> O*(7.12)			$90 \pm 27$ eV <sup>e</sup>
$\Gamma_{\alpha_0}$		$0.162 \pm 0.030$ keV <sup>f</sup>	$< 19$ eV <sup>d</sup>
$\Gamma_{\gamma_1}$		$21.6 \pm 3.6$ eV <sup>f</sup>	$6.0 \pm 2.5$ eV
$\theta^2(\text{g.s.})/\theta^2(6.13)$		$0.31 \pm 0.14$	$0.065 \pm 0.019$

<sup>a</sup> See also Table 2 in (1973AD02) and reaction 8.

<sup>b</sup> (1981HI01) [see for IMME parameters for six  $T = \frac{3}{2}$  states].

<sup>c</sup> For references see Table 17.11 in (1982AJ01).

<sup>d</sup> (1976MC11).

<sup>e</sup> Note that the total width is  $200 \pm 40$  eV.

<sup>f</sup> Using  $[\Gamma_{\alpha_0}/\Gamma_{n_0}]^{1/2}/\Gamma_{\text{tot}} = 0.23$  (1976MC11),  $\Gamma_{\alpha_0}\Gamma_{\gamma_1}/\Gamma_{\text{tot}} = 1.46 \pm 0.13$  eV (1983RA29) and the  $\Gamma_{n_0}$  and  $\Gamma_{\text{tot}}$  values shown above, these values are calculated for  $\Gamma_{\alpha_0}$  and  $\Gamma_{\gamma_1}$ , and  $\delta = 3.1 \pm 1.9$ . However these values do not take into account any error in the measurement of  $[\Gamma_{\alpha_0}\Gamma_{n_0}]^{1/2}/\Gamma_{\text{tot}}$  [F.C. Barker, private communication]. I am also indebted to C. Rangacharyulu for his comment [(A later communication with Dr. A.B. McDonald suggests that  $\Gamma_{\alpha_0}\Gamma_{n_0}/\Gamma_{\text{tot}} = 0.27$  keV [ $\pm \approx 20\%$ ] (from a re-examination of (1976MC11)). Then  $\Gamma_{\alpha_0} = 0.3$  keV and  $\Gamma_{\gamma_1} = 12$  eV. I am indebted to Prof. McDonald for his comments)].