

Table 17.6 from (1982AJ01): States of  $^{17}\text{N}$  from  $^{15}\text{N}(t, p)$  <sup>a</sup>

$E_x$ (keV)	$L$	$J^\pi$	$E_x$ (keV)	$L$	$J^\pi$
$0^b$	0	$\frac{1}{2}^-$	$4420 \pm 7^b$	2	$(\frac{3}{2}, \frac{5}{2})^-$
$1372 \pm 6^b$	2	$(\frac{3}{2}, \frac{5}{2})^-$	$5179 \pm 4^c$ }	5	$(\frac{9}{2}^+)$
$1851 \pm 4$	1	$(\frac{1}{2}, \frac{3}{2})^+$		1	$((\frac{1}{2}, \frac{3}{2})^+)$
$1909 \pm 3^b$	2	$(\frac{3}{2}, \frac{5}{2})^-$	$5517 \pm 6$	(2)	
$2524 \pm 4$	3	$(\frac{5}{2}, \frac{7}{2})^+$	$5780 \pm 6$	(1)	
$3127 \pm 6^b$	4	$(\frac{7}{2}, \frac{9}{2})^-$	$6233 \pm 8^d$	(2)	
$3201 \pm 5^b$	2	$(\frac{3}{2}, \frac{5}{2})^-$	$6449 \pm 3$	(4, 5)	
$3625 \pm 6^b$	4	$(\frac{7}{2}, \frac{9}{2})^-$	$6627 \pm 30$	weak	
$3664 \pm 6^b$	0	$\frac{1}{2}^-$	$6938 \pm 15$ }	(3, 4)	
			$6981 \pm 20$ }		
			$7013 \pm 22$ }		
$3906 \pm 5^b$	2	$(\frac{3}{2}, \frac{5}{2})^-$			
$4011 \pm 6$	(1)				
$4213 \pm 6$	3	$\frac{5}{2}^+ e$			

<sup>a</sup> (1979FO14):  $E_t = 15.0$  MeV; DWBA analysis. See also (1978MO18).

<sup>b</sup> Predominantly 2p-1h states.

<sup>c</sup> Unresolved states.

<sup>d</sup>  $^{17}\text{N}^*(6.08)$  is not observed.

<sup>e</sup> The  $\frac{7}{2}^+$  possibility can be eliminated because the  $4.21 \rightarrow 1.37$  MeV transition would then have too large an M2 strength ( $> 500$  W.u.) [P.M. Endt, private communication].