

Table 19.21 from (1983AJ01):  
States of  $^{19}\text{F}$  from  $^{19}\text{F}(\text{p}, \text{p}')^{19}\text{F}^*$

$E_x$ (keV) <sup>a</sup>	$L$ <sup>b</sup>	$\beta_L$ <sup>b</sup>	$J^\pi$
$197.6 \pm 0.6$	2	0.55	$\frac{5}{2}^+$
$1345.8 \pm 0.2$	3	0.33	$\frac{5}{2}^-$
$1458.8 \pm 0.3$			$\frac{3}{2}^-$
$1554.0 \pm 0.4$	2	0.58	$\frac{3}{2}^+$
$2779.8 \pm 0.6$	4	0.22	$\frac{9}{2}^+$
$3907.1 \pm 1.0$			$\frac{3}{2}^+$
$3998.5 \pm 0.8$			$\frac{7}{2}^-$
$4032.5 \pm 2$			$\frac{9}{2}^-$
$4377.7 \pm 1.0$			$\frac{7}{2}^+$
$4548.8 \pm 1.0$	2	0.20	$\frac{5}{2}^+$
$4557.5 \pm 1.0$			$\frac{3}{2}^-, (\frac{1}{2}^-)$
$4682.5 \pm 1.2$	<sup>c</sup>		
$5110 \pm 10$	2	0.15 <sup>d</sup>	$\frac{5}{2}^{(-)}$
$5340 \pm 10$			
$5420 \pm 10$	3	0.45	$\frac{7}{2}^-$
$5470 \pm 10$			
$5500 \pm 10$			
$5540 \pm 10$			
$5630 \pm 10$	<sup>e</sup>		
$5940 \pm 10$			
(6080)			
$6090 \pm 10$			
$6170 \pm 10$			
$6250 \pm 10$			
$6290 \pm 10$			
$6330 \pm 10$			

<sup>a</sup> For references see Table 19.21 in (1978AJ03).

<sup>b</sup> (1974DE46):  $E_p = 30$  MeV.

<sup>c</sup> (1974DE46) report excitation of a state with  $E_x = 4.69$  MeV,  $J^\pi = \frac{3}{2}^-$ ,  $L = 3$ ,  $\beta_L = 0.17$ .

<sup>d</sup> If  $L = 2$ .

<sup>e</sup> (1974DE46) report excitation of a state with  $E_x = 5.63$  MeV,  $J^\pi = \frac{5}{2}^-$ ,  $L = 3$ ,  $\beta_L = 0.33$ .