

Table 19.9 from (1978AJ03):  
Levels of  $^{19}\text{F}$  from  $^{15}\text{N}(\alpha, \alpha_0)^{15}\text{N}$  <sup>a</sup>

$E_\alpha$ (MeV $\pm$ keV)	$\Gamma_{\text{lab}}$ (keV)	$J^\pi$	$E_x$ (MeV)
1.878 $\pm$ 10	4	$\frac{3}{2}^+$	5.496
2.614 $\pm$ 10	1.5	$\frac{5}{2}^+$	6.077
2.635 $\pm$ 10	5	$\frac{5}{2}^-$	6.094
2.833 $\pm$ 10	10	$\frac{1}{2}^+$	6.250
2.883 $\pm$ 10	3	$\frac{5}{2}^+$	6.289
2.944 $\pm$ 10	3	$\frac{7}{2}^+$	6.338
3.060 $\pm$ 10 <sup>b</sup>	360	$\frac{1}{2}^-$	6.429 $\pm$ 0.008
3.194 $\pm$ 10	5	$\frac{1}{2}^+$	6.535
3.229 $\pm$ 10	2	$\frac{5}{2}^+$	6.563
3.525 $\pm$ 10	3	$\frac{3}{2}^-$	6.796
3.587 $\pm$ 10	1.5	$(\frac{5}{2}, \frac{3}{2})^+$	6.845
3.648 $\pm$ 10	35	$\frac{5}{2}^-$	6.893
3.705 $\pm$ 10	3	$(\frac{9}{2}, \frac{7}{2})^-$	6.938
3.770 $\pm$ 10 <sup>b</sup>	64	$\frac{1}{2}^-$	6.989 $\pm$ 0.008
3.930 $\pm$ 10 <sup>b</sup>	40	$\frac{7}{2}^+$	7.116 $\pm$ 0.008
4.127 <sup>c</sup>	$\lesssim 8$		7.271
4.23	$\lesssim 82$	$\frac{7}{2}^+$	7.35
4.49	$\lesssim 110$	$\frac{7}{2}^+$	7.56
4.53	$\lesssim 50$	$\frac{5}{2}^+$	7.59
4.710	$\lesssim 40$	$\frac{1}{2}^-$	7.731
4.780	$\lesssim 8$		7.787
4.93	$\lesssim 260$		7.90
(5.005)	( $\lesssim 8$ )		(7.964)
(5.018)	( $\lesssim 5$ )		(7.974)
5.116	$\lesssim 8$		8.052
5.203	$\lesssim 8$		8.120
5.232	$\lesssim 6$		8.143
5.25	$\lesssim 65$		8.16
5.284	$\lesssim 10$		8.184
5.481	$\lesssim 10$		9.340

<sup>a</sup> (1959SM02, 1961SM02, 1972MO42).

<sup>b</sup> See also (1977DI08).

<sup>c</sup> I am indebted to Prof. C. Rolfs for his comments on the resonances above 4 MeV.