

Table 17.17 from (1971AJ02): Energy levels of ^{17}F ^a

E_x in ^{17}F (MeV \pm keV)	$J^\pi; T$	τ or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
0	$\frac{5}{2}^+; \frac{1}{2}$	$\tau_{1/2} = 66.0 \pm 0.2$ sec	β^+	1, 2, 4, 6, 13, 14, 15, 16, 17, 18, 19, 20, 21
0.49533 \pm 0.10	$\frac{1}{2}^+$	$\tau_m = 412 \pm 9$ psec	γ	4, 6, 13, 15, 16, 17, 18, 20
3.105 \pm 7	$\frac{1}{2}^-$	$\Gamma = 19 \pm 1$	p	6, 7, 13, 15, 20
3.86	$\frac{5}{2}^-$	$\tau_m = 6 \pm 1$ fsec	γ, p	6, 7, 13, 14, 15, 20
4.696 \pm 10	$\frac{3}{2}^-$	$\Gamma = 230$	p	7, 13, 20
5.103 \pm 10	$\frac{3}{2}^+$	1530	p	7
5.521 \pm 10	$\frac{3}{2}^-$	69	p	7, 14
5.672 \pm 10	$\frac{7}{2}^-$	40	p	7, 14
5.681 \pm 10	$\frac{1}{2}^+$	< 0.6	p	7
5.817 \pm 10	$\frac{3}{2}^+$	180	p	7
6.036 \pm 10	$\frac{1}{2}^-$	28	p	7
6.556 \pm 10	$\frac{1}{2}^+$	203	p	7
6.699 \pm 10	$\frac{3}{2}^-$	< 3	p	7
6.774 \pm 10	$\frac{3}{2}^+$	4.5	p	7
7.027 \pm 10	$\frac{3}{2}^-$	3.8	p	7
7.356 \pm 10	$\frac{3}{2}^+$	10 ± 2	p, α	7, 8
7.448 \pm 7		≤ 5	p	7
7.454 \pm 7		7 ± 2	p, α	7, 8
7.471 \pm 7		5 ± 2	p	7
7.478 \pm 10	$\frac{3}{2}^+$	795	p	7
7.546 \pm 10	$\frac{7}{2}^-$	28	p	7
7.75 \pm 20	$\frac{1}{2}^+$	179 ± 3	p, α	7, 8
7.95 \pm 15		10 ± 3	p	7
8.01 \pm 20		47 ± 20	p, α	7, 8
8.07 \pm 15	$\frac{5}{2}^+$	100 ± 20	p, α	7, 8
8.2	$\frac{3}{2}^-$	700 ± 240	p, α	7, 8
8.383 \pm 5	$\frac{5}{2}^-$	11 ± 5	p, α	7, 8
8.416 \pm 10	$\frac{7}{2}^+$	42 ± 10	p, α	7, 8
8.75 \pm 30	$\frac{5}{2}^+$	170 ± 30	p, α	7, 8

Table 17.17 from (1971AJ02): Energy levels of ^{17}F ^a (continued)

E_x in ^{17}F (MeV \pm keV)	$J^\pi; T$	τ or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
8.95 \pm 20	$\frac{5}{2}^-$	120 \pm 20	p, α	7, 8
9.3 \pm 150	$\frac{3}{2}^+$	210 \pm 40	p, α	7, 8
9.62 \pm 20		310 \pm 70	p	7
9.88 \pm 20		130 \pm 20	p, α	7, 8
9.93 \pm 20		420 \pm 90	p	7
10.04 \pm 20	$\frac{7}{2}$	280 \pm 90	p	7
10.22 \pm 20		250 \pm 80	α	8
10.40 \pm 20		160 \pm 40	p	7
10.49 \pm 20	$\frac{7}{2}^-$	140 \pm 30	p, α	7, 8
(10.70 \pm 20)		140 \pm 30	p, α	7, 8
10.79 \pm 20		120 \pm 40	p, α	7, 8
10.95 \pm 20		190 \pm 50	p, α	7, 8
11.204 \pm 5	$\frac{1}{2}^-; \frac{3}{2}$	< 2	p, α	5, 7, 8
11.43 \pm 20		240 \pm 60	p, α	7, 8
11.57 \pm 40		160 \pm 30	p	7
(11.78 \pm 20)		190 \pm 90	p	7
(11.87 \pm 20)		40 \pm 20	α	8
12.00 \pm 20		120 \pm 40	p, α	7, 8
(12.19 \pm 20)		160 \pm 60	p, α	7, 8
12.25 \pm 20	$\frac{3}{2}^-$	190 \pm 50	p	7
12.35 \pm 20		260 \pm 50	p	7
12.556 \pm 7	$\frac{3}{2}^-; \frac{3}{2}$	≤ 3	p, α	5, 7, 8
(12.8)		≈ 3800	p	7
13.060 \pm 4	$(\frac{3}{2}, \frac{5}{2})^-; \frac{3}{2}$	≤ 4	p, α	5, 7, 8
13.082 \pm 5	$T = \frac{3}{2}$	≤ 5	p, α	7, 8
(13.15)		≈ 400	p	7
(13.7)		≈ 300	p	7
13.779 \pm 5	$T = \frac{3}{2}$	≈ 10	p, α	7, 8
14.310 \pm 5	$T = \frac{3}{2}$	≈ 14	p, α	7, 8
14.5		≈ 700	p	7

Table 17.17 from (1971AJ02): Energy levels of ^{17}F ^a (continued)

E_x in ^{17}F (MeV \pm keV)	$J^\pi; T$	τ or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
14.8		≈ 600	p	7
(15.2)		≈ 500	p	7
15.6		≈ 500	p	7
(16.0)		≈ 400	p	7
(16.5)		≈ 500	p	7
(16.7)		≈ 400	p	7
(17.02)		≈ 400	p	7
17.2	$\frac{5}{2}^-$	≈ 450	p	7
17.4		≈ 400	p	7
(17.67)		≈ 400	p	7
(17.9)		≈ 450	p	7
(18.5)		≈ 400	p	7
19.8	$\frac{3}{2}$		p	7
20.7		≈ 400	p	7
21.6		≈ 400	p	7
22.4		≈ 400	p	7
25.7	$\frac{3}{2}^-$	broad	p	7
27.3	$\frac{5}{2}^-$		p	7

^a See also [Table 17.20](#).