

Table 17.18 from (1982AJ01): Energy levels of ^{17}F

E_x in ^{17}F (MeV \pm keV)	$J^\pi; T$	τ or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
0	$\frac{5}{2}^+; \frac{1}{2}$	$\tau_{1/2} = 64.49 \pm 0.16$ sec	β^+	1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32
0.49533 ± 0.10	$\frac{1}{2}^+$	$\tau_m = 412 \pm 9$ psec	γ	3, 5, 8, 10, 12, 18, 19, 22, 23, 24, 25, 26, 27, 28, 30, 32
3.104 ± 3	$\frac{1}{2}^-$	$\Gamma = 19 \pm 1$	γ, p	5, 8, 10, 12, 13, 18, 19, 28, 30
3.857 ± 4	$\frac{5}{2}^-$	1.5 ± 0.2	γ, p	5, 8, 10, 12, 13, 18, 19, 30
4.696 ± 10	$\frac{3}{2}^-$	225	p	8, 10, 13, 18, 28
5.103 ± 10	$\frac{3}{2}^+$	1530	p	12
5.22 ± 10	$(\frac{9}{2}^-)$			8, 10, 11
5.521 ± 10	$\frac{3}{2}^-$	68	p	8, 10, 13, 28
5.672 ± 10	$\frac{7}{2}^-$	40	p	8, 10, 13
5.682 ± 10	$\frac{1}{2}^+$	< 0.6	p	8, 10, 13
5.817 ± 10	$\frac{3}{2}^+$	180	p	8, 13
6.036 ± 10	$\frac{1}{2}^-$	30	p	8, 10, 13, 28
6.556 ± 10	$\frac{1}{2}^+$	200	p	13
6.7087 ± 0.3	$(\frac{3}{2}, \frac{5}{2})^+$	< 3	p	8, 10, 13
6.774 ± 10	$\frac{3}{2}^+$	4.5	p	13
7.027 ± 10	$\frac{5}{2}^-$	3.8	p	10, 13
7.356 ± 10	$\frac{3}{2}^+$	10 ± 2	p, α	10, 13, 17
7.448 ± 7		≤ 5	p	13
7.454 ± 7		7 ± 2	p, α	13, 17
7.471 ± 7		5 ± 2	p	13
7.479 ± 10	$\frac{3}{2}^+$	795	p	13
7.546 ± 10	$\frac{7}{2}^-$	30	p	13
7.75 ± 20	$(\frac{1}{2}^+)$	179 ± 3	p, α	13, 17, 28
7.95 ± 15		10 ± 3	p	13
8.01 ± 20		50 ± 20	p, α	13, 17

Table 17.18 from (1982AJ01): Energy levels of ^{17}F (continued)

E_x in ^{17}F (MeV \pm keV)	$J^\pi; T$	τ or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
8.075 \pm 10	$\frac{5}{2}^+$	100 \pm 20	p, α	10, 13, 17, 28
8.2	$\frac{3}{2}^-$	700 \pm 250	p, α	13, 17
8.383 \pm 5	$\frac{5}{2}^-$	11 \pm 5	p, α	13, 17
8.416 \pm 10	$\frac{7}{2}^+$	45 \pm 10	p, α	13, 17, 28
8.75 \pm 30	$\frac{5}{2}^+$	170 \pm 30	p, α	13, 17
8.76	$\frac{3}{2}^+$	90 \pm 20	p	13
8.98 \pm 20	$\frac{7}{2}^-$	165 \pm 30	p, α	13, 17
9.17 \pm 60	$\frac{3}{2}^-$	140 \pm 30	p, α	13, 17
9.92	$\frac{9}{2}^+$	90 \pm 30	p, α	13, 17
10.04 \pm 20	$\frac{7}{2}$	280 \pm 100	p	13
10.22 \pm 20		250 \pm 80	α	17
10.40 \pm 20	$(\frac{5}{2}^+)$	160 \pm 40	p	13
10.499 \pm 15	$\frac{7}{2}^-$	165 \pm 25	p, α	13, 17
10.79 \pm 20		120 \pm 40	p, (α)	13, 17
10.91 \pm 100	$\frac{1}{2}^-$	560 \pm 100	p	13
10.95 \pm 20		190 \pm 50	p, (α)	13, 17
11.1928 \pm 2.3	$\frac{1}{2}^-; \frac{3}{2}$	0.20 \pm 0.04	γ , p, α	10, 12, 13, 17, 28
11.43 \pm 20		240 \pm 50	p, α	13, 17
11.58 \pm 40		160 \pm 30	p	13
12.00 \pm 20		120 \pm 40	p, α	13, 17
12.25 \pm 20	$\frac{3}{2}^-$	300 \pm 30	p	13
12.355 \pm 10	$\frac{1}{2}^-$	190 \pm 20	p	13
\approx 12.50	$\frac{7}{2}^-$	\approx 600	p	13
12.5501 \pm 0.9	$\frac{3}{2}^-; \frac{3}{2}$	2.83 \pm 0.12	γ , p, α	10, 12, 13, 17
13.061 \pm 4	$\frac{5}{2}^-; \frac{3}{2}$	2 \pm 1	γ , p, α	10, 12, 13, 17
13.080 \pm 4	$(\frac{1}{2}^+); \frac{3}{2}$	2 \pm 1	p, α	13, 17
13.13 \pm 100	$\frac{5}{2}^-$	520 \pm 50	p	13
13.781 \pm 4	$\frac{5}{2}^+; \frac{3}{2}$	12 \pm 5	p, α	13, 17
14.00 \pm 50	$\frac{7}{2}^-$	260 \pm 30	p	13
14.176 \pm 6	$\frac{3}{2}^-; \frac{3}{2}$	30 \pm 5	γ , p	12, 13
14.3037 \pm 3.1	$\frac{7}{2}^-; \frac{3}{2}$	19.3 \pm 1.6	γ , p, α	12, 13, 17

Table 17.18 from (1982AJ01): Energy levels of ^{17}F (continued)

E_x in ^{17}F (MeV \pm keV)	$J^\pi; T$	τ or $\Gamma_{\text{c.m.}}$ (keV)	Decay	Reactions
14.38 \pm 50	$\frac{5}{2}^-$	610 \pm 50	p	13
14.71 \pm 100	$\frac{1}{2}^-$	470 \pm 100	p	13
14.809 \pm 20	$\frac{1}{2}^+$	190 \pm 25	p	13
15.6		\approx 550	p	13
17.1	$\frac{5}{2}^-$	1500	p	13
20.1 \pm 200		1070 \pm 160	$\gamma, ^3\text{He}$	5
20.4 \pm 100		700 \pm 100	$\gamma, ^3\text{He}$	5
20.9	$\frac{9}{2}^+$	600	p	13
21.3 \pm 100		900 \pm 100	$\gamma, ^3\text{He}$	5
21.8	$(\frac{9}{2}^+)$	400	p	13
22.7	$\frac{7}{2}^+$	600	p	13
23.8	$\frac{7}{2}^+$	600	p	13
25.4	$\frac{7}{2}^-$	1500	p	13
27.2	$\frac{5}{2}^-$	1500	p	13
28.9	$\frac{5}{2}^+$	2000	p	13