

Table 19.8 from (1987AJ02): Lifetimes of some ^{19}F states

$^{19}\text{F}^*$ (MeV)	J^π	τ_m	Refs.
0.110	$\frac{1}{2}^-$	0.853 ± 0.010 nsec	mean: see (1972AJ02)
0.197	$\frac{5}{2}^+$	128.8 ± 1.5 nsec	mean: see (1978AJ03)
1.35	$\frac{5}{2}^-$	4.17 ± 0.06 psec ^a	(1983BI03)
1.46	$\frac{3}{2}^-$	90 ± 20 fsec	c
1.55	$\frac{3}{2}^+$	5 ± 3 fsec	c
2.78	$\frac{9}{2}^+$	280 ± 30 fsec	c
3.91	$\frac{3}{2}^+$	9 ± 5 fsec	c
4.00	$\frac{7}{2}^-$	19 ± 7 fsec	c
4.03	$\frac{9}{2}^-$	67 ± 5 fsec	c
4.38	$\frac{7}{2}^+$	< 11 fsec	c
4.55	$\frac{5}{2}^+$	< 50 fsec	c
4.56	$\frac{3}{2}^-$	17_{-8}^{+10} fsec ^b	c
4.65	$\frac{13}{2}^+$	3.68 ± 0.38 psec ^b	(1983BI03)
4.68	$\frac{5}{2}^-$	15.4 ± 3.0 fsec	c
5.11	$\frac{5}{2}^+$	< 30 fsec	c
5.34	$\frac{1}{2}^{(+)}$	≤ 0.1 fsec	c
5.42	$\frac{7}{2}^-$	≤ 0.9 fsec	c
5.46	$\frac{7}{2}^+$	≤ 0.26 fsec	c
5.62	$\frac{5}{2}^-$	< 1.3 fsec	c

^a $|M|^2 = 21.4 \pm 0.3$ W.u. (1983BI03) for the E2 transition [1.35 \rightarrow 0.11]. See also (1985KE1C) and Table 19.8 in (1983AJ01).

^b $|M|^2 = 3.1 \pm 0.3$ W.u. (1983BI03). See also (1983AJ01).

^c See Table 19.8 in (1983AJ01) and Table 19.9 here.