

Table 19.8 from (1983AJ01): Lifetimes of some  $^{19}\text{F}$  states <sup>a</sup>

$^{19}\text{F}^*$ (MeV)	$\tau_m$	Refs.
0.110	$0.853 \pm 0.010$ nsec	mean: see (1972AJ02)
0.197	$128.8 \pm 1.5$ nsec	mean: see (1978AJ03)
1.35	$3.7 \pm 0.7$ psec	(1980AN02)
	$4.4 \pm 0.6$ psec <sup>A</sup>	see (1980AN02)
1.46	$140 \pm 15$ fsec	(1980AN02)
	$90 \pm 20$ fsec <sup>A</sup>	see <sup>e</sup>
1.55	$5 \pm 3$ fsec	(1980AN02)
2.78	$370 \pm 25$ fsec	(1980AN02)
	$280 \pm 30$ fsec <sup>A</sup>	see <sup>e</sup>
3.91 <sup>b</sup>	$9 \pm 5$ fsec	(1977DI18)
4.00 <sup>b</sup>	$19 \pm 7$ fsec	(1980AN02)
4.03	$63 \pm 19$ fsec	(1980AN02)
	$67 \pm 15$ fsec <sup>A</sup>	see (1980AN02)
4.38 <sup>c</sup>	$< 11$ fsec	(1975LE16)
4.55 <sup>d</sup>	$< 50$ fsec	(1976RO07)
4.56	$17^{+10}_{-8}$ fsec <sup>A</sup>	(1975LE16)
	$< 30$ fsec	(1976BH03)
4.65	$2.2 \pm 0.3$ psec	mean: see (1978AJ03)
4.68 <sup>d</sup>	$15.4 \pm 3.0$ fsec	(1972RO01)
5.11 <sup>d</sup>	$< 30$ fsec	(1976RO07)
5.34	$\leq 0.1$ fsec	see <sup>f</sup>
5.42	$\leq 0.9$ fsec	see <sup>g</sup>
5.46	$\leq 0.26$ fsec	see <sup>f</sup>
5.62	$< 1.3$ fsec	see <sup>f</sup>

A = adopted.

<sup>a</sup> See also Tables 19.10 in (1972AJ02) and in (1978AJ03). I am greatly indebted to Dr. D.W.O. Rogers for his comments and criticisms of the 1978 table.

<sup>b</sup> See also (1976BH03).

<sup>c</sup> See also (1976RO07).

<sup>d</sup> See also (1975LE16).

<sup>e</sup> P.M. Endt, private communication; based on reassessment of uncertainties in  $\tau_m$  measurements.

<sup>f</sup> Using the rule  $\Gamma > 4\Gamma_\alpha\Gamma_\gamma/\Gamma$  (P.M. Endt, private communication). See also (1980AN02, 1975LE16).

<sup>g</sup> From  $\omega\gamma$  and  $\Gamma_\gamma/\Gamma$  (P.M. Endt, private communication). See also (1980AN02).