

Table 18.15 from (1972AJ02):  
Lifetime measurements of some  $^{18}\text{F}$  states

$^{18}\text{F}^*$ (MeV)	$\tau_m$	Reaction	Refs.
0.94	$68 \pm 7$ psec	$^3\text{H}(^{16}\text{O}, ^{18}\text{F})\text{n}$	(1966AL04) <sup>a</sup>
1.04	$4_{-2}^{+3}$ fsec	$^{18}\text{O}(\text{p}, \text{n})^{18}\text{F}$	(1967BL18) <sup>b,c</sup>
1.08	$30 \pm 3$ psec	$^3\text{H}(^{16}\text{O}, ^{18}\text{F})\text{n}$	(1966AL04) <sup>b</sup>
1.13	220 nsec	$^{16}\text{O}(^3\text{He}, \text{p})^{18}\text{F}$	(1970BL1F)
	$190 \pm 45$ nsec	$^{16}\text{O}(^3\text{He}, \text{p})^{18}\text{F}$	(1959AL99)
	$221 \pm 21$ nsec	$^{16}\text{O}(^3\text{He}, \text{p})^{18}\text{F}$	(1967BE14)
	$219 \pm 10$ nsec	$^{16}\text{O}(^3\text{He}, \text{p})^{18}\text{F}$	(1967PO09)
1.70	$218 \pm 9$ nsec		mean value
	$2.0 \pm 1.0$ psec	$^3\text{H}(^{16}\text{O}, ^{18}\text{F})\text{n}$	(1963LI07)
	$0.86 \pm 0.20$ psec	$^{16}\text{O}(^3\text{He}, \text{p})^{18}\text{F}$	(1966OL03)
2.10	$0.86 \pm 0.20$ psec		best value
	$0.70 \pm 0.20$ psec	$^3\text{H}(^{16}\text{O}, ^{18}\text{F})\text{n}$	(1963LI07)
	$5 \pm 3$ psec	$^3\text{H}(^{16}\text{O}, ^{18}\text{F})\text{n}$	(1966AL04)
	$4.1 \pm 1.6$ psec	$^{16}\text{O}(^3\text{He}, \text{p})^{18}\text{F}$	(1966OL03)
2.53	$4.3 \pm 1.4$ psec		best value
	$1.1 \pm 0.2$ psec	$^3\text{H}(^{16}\text{O}, ^{18}\text{F})\text{n}$	(1963LI07)
	$0.63_{-0.14}^{+0.18}$ psec	$^{16}\text{O}(^3\text{He}, \text{p})^{18}\text{F}$	(1967WA06)
	$0.67 \pm 0.18$ psec	$^{16}\text{O}(^3\text{He}, \text{p})^{18}\text{F}$	(1966OL03)
3.06	$0.65 \pm 0.13$ psec		best value
	$< 0.20$ psec	$^{16}\text{O}(^3\text{He}, \text{p})^{18}\text{F}$	(1967WA06)
	$< 0.17$ psec	$^{16}\text{O}(^3\text{He}, \text{p})^{18}\text{F}$	(1966OL03)
	$\leq 1.2$ fsec	$^{17}\text{O}(\text{d}, \text{n})^{18}\text{F}$	(1971LE29)
3.13	$0.37_{-0.10}^{+0.15}$ psec	$^{16}\text{O}(^3\text{He}, \text{p})^{18}\text{F}$	(1967WA06)
3.36	$0.55_{-0.15}^{+0.20}$ psec	$^{16}\text{O}(^3\text{He}, \text{p})^{18}\text{F}$	(1967WA06)
	$0.46 \pm 0.10$ psec	$^{16}\text{O}(^3\text{He}, \text{p})^{18}\text{F}$	(1966OL03)
3.72	$0.48 \pm 0.09$ psec		mean value
	$< 0.08$ psec	$^{16}\text{O}(^3\text{He}, \text{p})^{18}\text{F}$	(1967WA06)
3.84	$< 0.1$ psec	$^{16}\text{O}(^3\text{He}, \text{p})^{18}\text{F}$	(1967WA06)
	$< 0.073$ psec	$^{16}\text{O}(^3\text{He}, \text{p})^{18}\text{F}$	(1966OL03)
4.36	$< 0.61$ psec	$^{16}\text{O}(^6\text{Li}, \alpha)^{18}\text{F}$	(1969TH01)
5.30	$31 \pm 6$ fsec	$^{14}\text{N}(\alpha, \gamma)^{18}\text{F}$	(1971RO25)

<sup>a</sup> See also (1963LI07, 1963LO03).

<sup>b</sup> See also (1963LI07).

<sup>c</sup> See also (1966OL03).