

Table 7.7 from (2002TI10): Energy levels of ${}^7\text{Be}$

E_x (MeV \pm keV)	$J^\pi; T$	τ or $\Gamma_{\text{c.m.}}$	Decay	Reactions
g.s.	$\frac{3}{2}^-; \frac{1}{2}$	$\tau_{1/2} = 53.22 \pm 0.06 \text{ d d}^{\text{a}}$	ϵ -capture	1, 2, 4, 5, 9, 10, 11, 13, 14, 15, 16, 17, 21, 22, 24, 25, 26, 27, 28, 29, 33, 34
0.42908 ± 0.10	$\frac{1}{2}^-; \frac{1}{2}$	$\tau_{\text{m}} = 192 \pm 25 \text{ fsec}$	γ	2, 4, 5, 9, 10, 14, 16, 17, 21, 22, 23, 24, 25, 26, 27, 28, 29, 33, 34
4.57 ± 50	$\frac{7}{2}^-; \frac{1}{2}$	$\Gamma = 175 \pm 7 \text{ keV}$	${}^3\text{He}, \alpha$	3, 5, 10, 14, 16, 17, 21, 22
6.73 ± 100	$\frac{5}{2}^-; \frac{1}{2}$	1.2 MeV	${}^3\text{He}, \alpha$	3, 8, 9, 14, 21
7.21 ± 60	$\frac{5}{2}^-; \frac{1}{2}$	$0.40 \pm 0.05^{\text{a}}$	p, ${}^3\text{He}, \alpha$	3, 6, 8, 9, 14, 17
9.27 ± 100	$\frac{7}{2}^-; \frac{1}{2}$		p, ${}^3\text{He}, \alpha$	3
9.9	$\frac{3}{2}^-; \frac{1}{2}$	$\approx 1.8 \text{ MeV}$	p, ${}^3\text{He}, \alpha$	3, 6
11.01 ± 30	$\frac{3}{2}^-; \frac{3}{2}$	$320 \pm 30 \text{ keV}$	p, ${}^3\text{He}, \alpha$	3, 6, 14, 21
17^{b}	$\frac{1}{2}^-; \frac{1}{2}$	$\approx 6.5 \text{ MeV}$	${}^3\text{He}$	3

^a Newly adopted in this evaluation or revised from the previous evaluation (1988AJ01).

^b For possible states at higher E_x see reactions 3 and 6.