

Table 7.6 from (1974AJ01): ${}^7\text{Be}$ levels from ${}^3\text{He} + {}^4\text{He}$ ^a

E_x (MeV \pm keV)	J^π	l_α	LS term	R (fm)	θ_α^2 ^b	θ_p^2	$\theta_{p'}^2$	Refs.
4.57 \pm 50 ^c 4.566	$\frac{7}{2}^-$	3	${}^2\text{F}_{7/2}$	4.0 4.4	0.70 \pm 0.04 0.34			(1967SP10) (1968IV01)
6.73 \pm 100 ^c	$\frac{5}{2}^-$	3	${}^2\text{F}_{5/2}$	4.0	1.36 \pm 0.13	0.000 \pm 0.002		(1967SP10)
7.21 \pm 60 ^c	$\frac{5}{2}^-$	3	${}^4\text{P}_{5/2}$	4.0	0.010 \pm 0.001	0.26 \pm 0.02		(1967SP10)
9.27 \pm 100 10.0 ^d	$\frac{7}{2}^-$ $\frac{3}{2}^-$	3 1	${}^4\text{D}_{7/2}$ (${}^4\text{P}_{3/2}$)	4.0	0.70 \pm 0.26	0.29 ^{+0.09} _{-0.18}	1.8 \pm 0.5	(1967SP10) (1967HA07, 1967HA08)
\approx 10.0 ^e 11.00 \pm 50 ^f	$\frac{1}{2}^-$ $\frac{3}{2}^-$	 1	(${}^4\text{P}_{1/2}$) (${}^2\text{P}_{3/2}$, ${}^2\text{D}_{3/2}$)			0.13 \pm 0.02 ^g		(1967HA07, 1967HA08) (1967HA07, 1967HA08)

^a Compare to Table 7.10 in (1966LA04).

^b $\gamma^2 / (\frac{3}{2} \hbar^2 / \mu a^2)$.

^c See also (1968LE1K).

^d $\Gamma = 1.8$ MeV.

^e Broad.

^f $\Gamma = 0.4 \pm 0.05$ MeV; $T = \frac{3}{2}$.

^g $\theta_p^{2''}$.