

Table 7.7 from (79AJ01):  ${}^7\text{Be}$  levels <sup>a</sup> from  ${}^3\text{He} + {}^4\text{He}$

$E_x$ (MeV $\pm$ keV)	$J^\pi$	$l_\alpha$	$LS$ term	$R$ (fm)	$\theta_\alpha^2$ <sup>b</sup>	$\theta_p^2$	$\theta_{p'}^2$	Refs.
$4.57 \pm 50$	$\frac{7}{2}$	3	${}^2F_{7/2}$	4.0	$0.70 \pm 0.04$			(SP67B)
$6.73 \pm 100$	$\frac{5}{2}^-$	3	${}^2F_{5/2}$	4.0	$1.36 \pm 0.13$	$0.000 \pm 0.002$		(SP67B)
$7.21 \pm 60$	$\frac{5}{2}^-$	3	${}^4P_{5/2}$	4.0	$0.010 \pm 0.001$	$0.26 \pm 0.02$		(SP67B)
$9.27 \pm 100$	$\frac{7}{2}^-$	3	${}^4D_{7/2}$	4.0	$0.70 \pm 0.26$	$0.29^{+0.09}_{-0.18}$	$1.8 \pm 0.5$	(SP67B)
10.0 <sup>c</sup>	$\frac{3}{2}^-$	1	( ${}^4P_{3/2}$ )					(HA67)
$\approx 10.0$ <sup>d</sup>	$\frac{1}{2}^-$		( ${}^4P_{1/2}$ )					(HA67)
$11.00 \pm 50$ <sup>e</sup>	$\frac{3}{2}^-$	1	( ${}^2P_{3/2}, {}^2D_{3/2}$ )			$0.13 \pm 0.02$ <sup>f</sup>		(HA67)

<sup>a</sup> Compare Table 7.10 (66LA04).

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

<sup>c</sup>  $\Gamma = 1.8$  MeV.

<sup>d</sup> Broad.

<sup>e</sup>  $\Gamma = 0.4 \pm 0.05$  MeV;  $T = \frac{3}{2}$ .

<sup>f</sup>  $\theta_p^{2''}$ .