

Table 7.8 from (1988AJ01):  ${}^7\text{Be}$  levels from  ${}^3\text{He} + {}^4\text{He}$  <sup>a</sup>

$E_x$ (MeV $\pm$ keV)	$J^\pi$	$l_\alpha$	$LS$ term	$\theta_\alpha^2$ <sup>b</sup>	$\theta_p^2$
$4.57 \pm 50$	$\frac{7}{2}^-$	3	${}^2\text{F}_{7/2}$	$0.70 \pm 0.04$	
$6.73 \pm 100$	$\frac{5}{2}^-$	3	${}^2\text{F}_{5/2}$	$1.36 \pm 0.13$	$0.000 \pm 0.002$
$7.21 \pm 60$	$\frac{5}{2}^-$	3	${}^4\text{P}_{5/2}$	$0.010 \pm 0.001$	$0.26 \pm 0.02$
$9.27 \pm 100$	$\frac{7}{2}^-$	3	${}^4\text{D}_{7/2}$	$0.70 \pm 0.26$	$0.29^{+0.09}_{-0.18}$ <sup>f</sup>
$10.0$ <sup>c</sup>	$\frac{3}{2}^-$	1	$({}^4\text{P}_{3/2})$		
$\approx 10.0$ <sup>d</sup>	$\frac{1}{2}^-$		$({}^4\text{P}_{1/2})$		
$11.00 \pm 50$ <sup>e</sup>	$\frac{3}{2}^-$	1	$({}^2\text{P}_{3/2}, {}^2\text{D}_{3/2})$		$0.13 \pm 0.02$ <sup>g</sup>

<sup>a</sup> See also Table 7.10 (1966LA01). For references see Table 7.7 in (1979AJ01).

<sup>b</sup>  $\gamma^2 / (\frac{3}{2}\hbar^2 / \mu a^2)$ .  $R = 4.0$  fm.

<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>  $\theta_{p1}^2 = 1.8 \pm 0.5$ .

<sup>g</sup>  $\theta_{p2}^2$ .