

Table 7.11 from (2002TI10):
Mirror states in $A = 7$ nuclei ^a

| ⁷ Li | | ⁷ Be | | ΔE_x (MeV) ^b |
|-----------------|-----------------|-----------------|-----------------|---------------------------------|
| E_x (MeV) | J^π | E_x (MeV) | J^π | |
| 0 | $\frac{3}{2}^-$ | 0 | $\frac{3}{2}^-$ | — |
| 0.478 | $\frac{1}{2}^-$ | 0.429 | $\frac{1}{2}^-$ | -0.049 |
| 4.65 | $\frac{7}{2}^-$ | 4.57 | $\frac{7}{2}^-$ | -0.08 |
| 6.60 | $\frac{5}{2}^-$ | 6.73 | $\frac{5}{2}^-$ | +0.13 |
| 7.45 | $\frac{5}{2}^-$ | 7.21 | $\frac{5}{2}^-$ | -0.24 |
| 8.75 | $\frac{3}{2}^-$ | 9.9 | $\frac{3}{2}^-$ | +1.15 ^c |
| 9.09 | $\frac{1}{2}^-$ | | | |
| 9.57 | $\frac{7}{2}^-$ | 9.27 | $\frac{7}{2}^-$ | -0.3 |

^a As taken from Tables 7.2 and 7.7.

^b Defined as $E_x(^7\text{Be}) - E_x(^7\text{Li})$.

^c This difference may be unphysical since the ⁷Li level parameters were obtained from the “extended R -matrix prescription” (see the Introduction in this publication). The equivalent information for ⁷Be levels is not available.