

Table 8.5 from (1959AJ76): Levels of  ${}^8\text{Be}$  from  ${}^4\text{He}(\alpha, \alpha){}^4\text{He}$  <sup>a</sup>

| $E_x$ (MeV) | $J^\pi$ | $\Gamma_{\text{c.m.}}$ | $R$ ( $10^{-13}$ cm) | $\theta^2$ ( $3\hbar^2/2MR^2$ ) |
|-------------|---------|------------------------|----------------------|---------------------------------|
| 0           | $0^+$   | $2.5 \pm 1$ eV         | 5.7                  | 0.15                            |
|             |         |                        | 4.44                 | 0.75                            |
| 2.9         | $2^+$   | 2.0 MeV                | 5.0                  | 0.7                             |
|             |         |                        | 3.5                  | 0.4                             |
| 11.8        | $4^+$   | 6.7 MeV                | 4.44                 | 1.3                             |

<sup>a</sup> From (1956HE57, 1956RU41, 1958NI05). Double entries indicate alternative solutions.