

63rd Eigenvector

$$N_e = 5 \quad s = \frac{1}{2} \quad m_s = \frac{1}{2}$$

Irred. Representation : $\Gamma_{3,2}$

$$E_{63} = t + 2U + 8W$$

$$\begin{aligned} |\Psi_{63}\rangle &= |5, \frac{1}{2}, \frac{1}{2}, \Gamma_{3,2}\rangle \\ &= C_{63,1} (|22u\rangle + |2u2\rangle) \\ &\quad + C_{63,2} (|u22\rangle) \end{aligned}$$

$$C_{63-1} = \frac{1}{\sqrt{6}}$$

$$C_{63-2} = -\sqrt{\frac{2}{3}}$$

$$N_{63} = \sqrt{2C_{63,1}^2 + C_{63,2}^2}$$