

5th Eigenvector

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

Irred. Representation : $\Gamma_{4,3}$

$$E_5 = -t$$

$$\begin{aligned} |\Psi_5\rangle &= |1, \frac{1}{2}, -\frac{1}{2}, \Gamma_{4,3}\rangle \\ &= \frac{1}{2}(|000d\rangle - |00d0\rangle + |0d00\rangle - |d000\rangle) \end{aligned}$$