

26th Eigenvector

$$N_e = 2 \quad s = 0 \quad m_s = 0$$

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

$$E_{26} = \frac{1}{2} \left(-J + U + 2W - \sqrt{A_1} \right)$$

$$\begin{aligned} |\Psi_{26}\rangle &= |2, 0, 0, \Gamma_{4,3}\rangle \\ &= C_{26,1} (|0002\rangle - |0020\rangle + |0200\rangle - |2000\rangle) \\ &\quad + C_{26,2} (|0d0u\rangle - |0u0d\rangle - |d0u0\rangle + |u0d0\rangle) \end{aligned}$$

$$C_{26-1} = -t$$

$$C_{26-2} = \frac{1}{4} \left(-J - U + 2W - \sqrt{A_1} \right)$$

$$N_{26} = 2\sqrt{C_{26,1}^2 + C_{26,2}^2}$$