

231st Eigenvector

$$N_e = 6 \quad s = 0 \quad m_s = 0$$

Irred. Representation : $\Gamma_{4,1}$

$$E_{231} = \frac{1}{2} \left(-J + 5U + 50W + \sqrt{A_1} \right)$$

$$\begin{aligned} |\Psi_{231}\rangle &= |6, 0, 0, \Gamma_{4,1}\rangle \\ &= C_{231,1} (|0222\rangle + |2022\rangle - |2202\rangle - |2220\rangle) \\ &\quad + C_{231,2} (|22du\rangle - |22ud\rangle - |du22\rangle + |ud22\rangle) \end{aligned}$$

$$C_{231-1} = -t$$

$$C_{231-2} = \frac{1}{4} \left(J + U - 2W - \sqrt{A_1} \right)$$

$$N_{231} = 2\sqrt{C_{231,1}^2 + C_{231,2}^2}$$