

## 237<sup>th</sup> Eigenvector

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

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

$$E_{237} = \frac{1}{2} \left( -J + 5U + 50W + \sqrt{A_1} \right)$$

$$\begin{aligned} |\Psi_{237}\rangle &= |6, 0, 0, \Gamma_{4,3}\rangle \\ &= C_{237,1} (|0222\rangle - |2022\rangle + |2202\rangle - |2220\rangle) \\ &\quad + C_{237,2} (|2d2u\rangle - |2u2d\rangle - |d2u2\rangle + |u2d2\rangle) \end{aligned}$$

$$C_{237-1} = -t$$

$$C_{237-2} = \frac{1}{4} \left( J + U - 2W - \sqrt{A_1} \right)$$

$$N_{237} = 2\sqrt{C_{237,1}^2 + C_{237,2}^2}$$