

## 233<sup>rd</sup> Eigenvector

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

Irred. Representation :  $\Gamma_{4,2}$

$$E_{233} = \frac{1}{2} \left( -J + 5U + 50W - \sqrt{A_1} \right)$$

$$\begin{aligned} |\Psi_{233}\rangle &= |6, 0, 0, \Gamma_{4,2}\rangle \\ &= C_{233,1} (|0222\rangle - |2022\rangle - |2202\rangle + |2220\rangle) \\ &\quad + C_{233,2} (|2du2\rangle - |2ud2\rangle - |d22u\rangle + |u22d\rangle) \end{aligned}$$

$$C_{233-1} = -t$$

$$C_{233-2} = \frac{1}{4} \left( J + U - 2W + \sqrt{A_1} \right)$$

$$N_{233} = 2\sqrt{C_{233,1}^2 + C_{233,2}^2}$$