

## 12<sup>nd</sup> Eigenvector

$$N_e = 2 \quad s = 1 \quad m_s = -1$$

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

$$E_{12} = \frac{1}{2}(J + 4(t + W))$$

$$\begin{aligned} |\Psi_{12}\rangle &= |2, 1, -1, \Gamma_{4,3}\rangle \\ &= \frac{1}{2}(|00dd\rangle - |0dd0\rangle + |d00d\rangle + |dd00\rangle) \end{aligned}$$