

## 97<sup>th</sup> Eigenvector

$$N_e = 4 \quad s = 1 \quad m_s = -1$$

Irred. Representation :  $\Gamma_{3,1}$

$$E_{97} = \frac{J}{2} + U + 10W$$

$$\begin{aligned} |\Psi_{97}\rangle &= |4, 1, -1, \Gamma_{3,1}\rangle \\ &= \frac{1}{2\sqrt{2}} (|02dd\rangle - |0dd2\rangle - |20dd\rangle + |2dd0\rangle - |d02d\rangle + |d20d\rangle + |dd02\rangle - |dd20\rangle) \end{aligned}$$