

## 113<sup>rd</sup> Eigenvector

$$N_e = 4 \quad s = 1 \quad m_s = 0$$

Irred. Representation :  $\Gamma_2$

$$E_{113} = U + 10W$$

$$\begin{aligned} |\Psi_{113}\rangle &= |4, 1, 0, \Gamma_2\rangle \\ &= \frac{1}{2\sqrt{6}} (|02du\rangle + |02ud\rangle - |0d2u\rangle + |0du2\rangle - |0u2d\rangle + |0ud2\rangle - |20du\rangle - |20ud\rangle \\ &\quad + |2d0u\rangle - |2du0\rangle + |2u0d\rangle - |2ud0\rangle + |d02u\rangle - |d0u2\rangle - |d20u\rangle + |d2u0\rangle \\ &\quad + |du02\rangle - |du20\rangle + |u02d\rangle - |u0d2\rangle - |u20d\rangle + |u2d0\rangle + |ud02\rangle - |ud20\rangle) \end{aligned}$$