

## 7<sup>th</sup> Eigenvector

$$N_e = 1 \quad s = \frac{1}{2} \quad m_s = \frac{1}{2}$$

Irred. Representation :  $\Gamma_{3,2}$

$$E_7 = -t$$

$$\begin{aligned} |\Psi_7\rangle &= |1, \frac{1}{2}, \frac{1}{2}, \Gamma_{3,2}\rangle \\ &= C_{7,1} (|00u\rangle + |0u0\rangle) \\ &\quad + C_{7,2} (|u00\rangle) \end{aligned}$$

$$C_{7-1} = -\frac{1}{\sqrt{6}}$$

$$C_{7-2} = \sqrt{\frac{2}{3}}$$

$$N_7 = \sqrt{2C_{7,1}^2 + C_{7,2}^2}$$