

21st Eigenvector

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

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

$$E_{21} = \frac{J}{2} + t + W$$

$$\begin{aligned} |\Psi_{21}\rangle &= |2, 1, 1, \Gamma_{3,1}\rangle \\ &= C_{21,1} (|0uu\rangle) \\ &\quad + C_{21,2} (|u0u\rangle - |uu0\rangle) \end{aligned}$$

$$C_{21-1} = -\sqrt{\frac{2}{3}}$$

$$C_{21-2} = -\frac{1}{\sqrt{6}}$$

$$N_{21} = \sqrt{C_{21,1}^2 + 2C_{21,2}^2}$$