

8th Eigenvector

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

Irred. Representation : Γ_2

$$E_8 = \frac{J}{2} - 2t + W$$

$$\begin{aligned} |\Psi_8\rangle &= |2, 1, -1, \Gamma_2\rangle \\ &= \frac{1}{\sqrt{3}} (|0dd\rangle - |d0d\rangle + |dd0\rangle) \end{aligned}$$