147$^{\text{th}}$ **Eigenvector**

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

Irred. Representation : Γ_2

$$E_{147} \quad = \quad \frac{J}{2} + U + 10W$$

$$
\begin{aligned}
|\Psi_{147}\rangle \quad &= \quad |4, 1, 1, \Gamma_2\rangle \\
&= \quad \frac{1}{2\sqrt{3}} \left(|02uu\rangle - |0u2u\rangle + |0uu2\rangle - |20uu\rangle + |2u0u\rangle - |2uu0\rangle \right. \\
&\qquad \left. + |u02u\rangle - |u0u2\rangle - |u20u\rangle + |u2u0\rangle + |uu02\rangle - |uu20\rangle \right)
\end{aligned}
$$