130th **Eigenvector**

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

Irred. Representation : $\mathbf{\Gamma_{4,2}}$

$E_{130} = U + 10W$

$$
\begin{aligned}
|\Psi_{130}\rangle &= |4, 1, 0, \Gamma_{4,2}\rangle \\
&= \frac{1}{4} \left(|02du\rangle + |02ud\rangle + |0d2u\rangle + |0u2d\rangle + |20du\rangle + |20ud\rangle + |2d0u\rangle + |2u0d\rangle \right. \\
&\qquad \left. - |d0u2\rangle - |d2u0\rangle - |du02\rangle - |du20\rangle - |u0d2\rangle - |u2d0\rangle - |ud02\rangle - |ud20\rangle \right)
\end{aligned}
$$