135th **Eigenvector**

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

Irred. Representation : $\Gamma_{5,1}$

$$E_{135} = -J + U + 10W$$

$$
\begin{aligned}
|\Psi_{135}\rangle &= |4, 0, 0, \Gamma_{5,1}\rangle \\
&= \frac{1}{4} \left(|02du\rangle - |02ud\rangle - |0du2\rangle + |0ud2\rangle - |20du\rangle + |20ud\rangle + |2du0\rangle - |2ud0\rangle \right. \\
&\qquad \left. + |d02u\rangle - |d20u\rangle + |du02\rangle - |du20\rangle - |u02d\rangle + |u20d\rangle - |ud02\rangle + |ud20\rangle \right)
\end{aligned}
$$