211$^{\text{st}}$ Eigenvector

$$N_e \;=\; 5 \qquad s = \frac{1}{2} \qquad m_s = \frac{1}{2}$$

Irred. Representation : $\Gamma_{5,2}$

$$E_{211} \;=\; \frac{1}{2}\left(-J + 2t + 3U + 34W + \sqrt{A_4}\right)$$

$$
\begin{aligned}
|\Psi_{211}\rangle \;=\;& |5, \tfrac{1}{2}, \tfrac{1}{2}, \Gamma_{5,2}\rangle \\
=\;& C_{211,1}\left(|022u\rangle - |02u2\rangle - |202u\rangle + |20u2\rangle - |2u02\rangle + |2u20\rangle + |u202\rangle - |u220\rangle\right) \\
+\;& C_{211,2}\left(|2duu\rangle - |d2uu\rangle - |uu2d\rangle + |uud2\rangle\right) \\
+\;& C_{211,3}\left(|2udu\rangle + |2uud\rangle - |du2u\rangle + |duu2\rangle - |u2du\rangle - |u2ud\rangle - |ud2u\rangle + |udu2\rangle\right)
\end{aligned}
$$

$$
\begin{aligned}
C_{211-1} \;=\;& \frac{1}{2}\sqrt{\frac{3}{2}}\,t \\
C_{211-2} \;=\;& -\frac{J - 2t + U - 2W - \sqrt{A_4}}{2\sqrt{6}} \\
C_{211-3} \;=\;& \frac{J - 2t + U - 2W - \sqrt{A_4}}{4\sqrt{6}} \\
N_{211} \;=\;& 2\sqrt{2C_{211,1}^2 + C_{211,2}^2 + 2C_{211,3}^2}
\end{aligned}
$$