$$H_{99} = \begin{bmatrix} -6\,\mu + U & \frac{-3\,t}{2} - \frac{\mathbf{i}}{2}\sqrt{3}\,t & 0 \\ \frac{-3\,t}{2} + \frac{\mathbf{i}}{2}\sqrt{3}\,t & -6\,\mu + U & -\left(\sqrt{\frac{3}{2}}\,t\right) + \frac{3\,\mathbf{i}\,t}{\sqrt{2}} \\ 0 & -\left(\sqrt{\frac{3}{2}}\,t\right) - \frac{3\,\mathbf{i}\,t}{\sqrt{2}} & -6\,\mu \end{bmatrix}$$