

In[•]:= ZA = KroneckerProduct[PauliMatrix[3], A];
[克罗内克积] [泡利自旋矩阵]

Grid[Insert[Transpose[{Eigenvalues[ZA], Normalize /@
[格子] [插入] [转置] [特征值] [正规化]

Eigenvectors[ZA]}], {"Eigenvalue", "Eigenvector"}, 1], Frame → All]
[特征向量] [边框] [全部]

Out[•]=

Eigenvalue	Eigenvector
-2	$\left\{0, 0, \frac{1}{\sqrt{2}}, \frac{1}{\sqrt{2}}\right\}$
2	$\left\{\frac{1}{\sqrt{2}}, \frac{1}{\sqrt{2}}, 0, 0\right\}$
0	$\left\{0, 0, -\frac{1}{\sqrt{2}}, \frac{1}{\sqrt{2}}\right\}$
0	$\left\{-\frac{1}{\sqrt{2}}, \frac{1}{\sqrt{2}}, 0, 0\right\}$