

In[240]:= **Mcχ // MatrixForm**

Out[240]//MatrixForm=

$$\begin{pmatrix} M2 & g2 \, v2 & 0 & 0 & 0 \\ g2 \, v1 & \kappa 0 \, \sigma S & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & v1 \, Y_{\tau} \end{pmatrix}$$

In[241]:= **Mnχ // MatrixForm**

Out[241]//MatrixForm=

$$\begin{pmatrix} M1 & 0 & -\frac{g1 \, v1}{\sqrt{2}} & \frac{g1 \, v2}{\sqrt{2}} & 0 & 0 & 0 & 0 & 0 \\ 0 & M2 & \frac{g2 \, v1}{\sqrt{2}} & -\frac{g2 \, v2}{\sqrt{2}} & 0 & 0 & 0 & 0 & 0 \\ -\frac{g1 \, v1}{\sqrt{2}} & \frac{g2 \, v1}{\sqrt{2}} & 0 & -\kappa 0 \, \sigma S & -v2 \, \kappa 0 & 0 & 0 & 0 & 0 \\ \frac{g1 \, v2}{\sqrt{2}} & -\frac{g2 \, v2}{\sqrt{2}} & -\kappa 0 \, \sigma S & 0 & -v1 \, \kappa 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & -v2 \, \kappa 0 & -v1 \, \kappa 0 & \kappa 3 \, \sigma S & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & v2 \, \kappa 1 [1] \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & v2 \, \kappa 1 [2] \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 0 & v2 \, \kappa 1 [3] \\ 0 & 0 & 0 & 0 & 0 & v2 \, \kappa 1 [1] & v2 \, \kappa 1 [2] & v2 \, \kappa 1 [3] & \kappa 2 \, \sigma S \end{pmatrix}$$