* Rank 0 tensor. * Rank 1 tensor.

$$\begin{bmatrix} T_x & 0 & 0 \end{bmatrix}$$

$$T_x = T_{px}^{(1)}$$

* Rank 2 tensor (s).

$$\begin{bmatrix} 0 & 0 & T_{xz} \\ 0 & 0 & 0 \\ T_{xz} & 0 & 0 \end{bmatrix}$$

$$T_{xz} = T_{dxz}^{(1)}$$

* Rank 2 tensor (a).

$$\begin{bmatrix} 0 & 0 & T_{xz} \\ 0 & 0 & 0 \\ -T_{xz} & 0 & 0 \end{bmatrix}$$

$$T_{xz} = -M_{py}^{(1)}$$

* Rank 3 tensor (s).

$$\begin{bmatrix} T_{xxx} & 0 & 0 \\ T_{yyx} & 0 & 0 \\ T_{zzx} & 0 & 0 \\ 0 & 0 & 0 \\ 0 & 0 & T_{zxz} \\ 0 & T_{xyy} & 0 \end{bmatrix}$$

$$T_{xxx} = 2T_{fax}^{(1)} + T_{px}^{(1)} + 2T_{px}^{(2)}$$
$$T_{yyx} = -2M_{dyz}^{(1)} - T_{fax}^{(1)} + T_{fbx}^{(1)} + T_{px}^{(1)}$$
$$T_{zzx} = 2M_{dyz}^{(1)} - T_{fax}^{(1)} - T_{fbx}^{(1)} + T_{px}^{(1)}$$
$$T_{zxz} = -M_{dyz}^{(1)} - T_{fax}^{(1)} - T_{fbx}^{(1)} + T_{px}^{(2)}$$
$$T_{xyy} = M_{dyz}^{(1)} - T_{fax}^{(1)} + T_{fbx}^{(1)} + T_{px}^{(2)}$$

* Rank 3 tensor (a).

$$\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & T_{zxz} \\ 0 & T_{xyy} & 0 \end{bmatrix}$$

$$T_{zxz} = M_{dyz}^{(2)} + T_{px}^{(3)}$$
$$T_{xyy} = M_{dyz}^{(2)} - T_{px}^{(3)}$$

* Rank 4 tensor (sss).

$$\begin{bmatrix} 0 & 0 & 0 & 0 & T_{xxzx} & 0 \\ 0 & 0 & 0 & 0 & T_{yyzx} & 0 \\ 0 & 0 & 0 & 0 & T_{zzzx} & 0 \\ 0 & 0 & 0 & 0 & 0 & T_{yzxy} \\ T_{xxzx} & T_{yyzx} & T_{zzzx} & 0 & 0 & 0 \\ 0 & 0 & 0 & T_{yzxy} & 0 & 0 \end{bmatrix}$$

$$T_{xxzx} = T_{dxz}^{(1)} + 2T_{dxz}^{(2)} - T_{gay}^{(1)} - T_{gby}^{(1)}$$

$$T_{yyzx} = T_{dxz}^{(1)} + 2T_{gby}^{(1)}$$

$$T_{zzzx} = T_{dxz}^{(1)} + 2T_{dxz}^{(2)} + T_{gay}^{(1)} - T_{gby}^{(1)}$$

$$T_{yzxy} = T_{dxz}^{(2)} + 2T_{gby}^{(1)}$$

* Rank 4 tensor (ssa).

$$\begin{bmatrix}
0 & 0 & 0 & 0 & T_{xxzx} & 0 \\
0 & 0 & 0 & 0 & T_{yyzx} & 0 \\
0 & 0 & 0 & 0 & T_{zzzx} & 0 \\
0 & 0 & 0 & 0 & 0 & T_{yzxy} \\
-T_{xxzx} & -T_{yyzx} & -T_{zzzx} & 0 & 0 & 0 \\
0 & 0 & 0 & -T_{yzxy} & 0 & 0
\end{bmatrix}$$

$$T_{xxzx} = 2M_{fay}^{(1)} + 2M_{fby}^{(1)} - 2M_{py}^{(1)} + T_{dxz}^{(3)}$$

$$T_{yyzx} = -4M_{fby}^{(1)} + T_{dxz}^{(3)}$$

$$T_{zzzx} = -2M_{fay}^{(1)} + 2M_{fby}^{(1)} + 2M_{py}^{(1)} + T_{dxz}^{(3)}$$

$$T_{yzxy} = 4M_{fay}^{(1)} + M_{py}^{(1)}$$

* Rank 4 tensor (aas).

$$\begin{bmatrix}
0 & 0 & T_{yzxy} \\
0 & 0 & 0 \\
T_{yzxy} & 0 & 0
\end{bmatrix}$$

$$T_{yzxy} = 2T_{dxz}^{(4)}$$

* Rank 4 tensor (aaa).

$$\begin{bmatrix}
0 & 0 & T_{yzxy} \\
0 & 0 & 0 \\
-T_{yzxy} & 0 & 0
\end{bmatrix}$$

$$T_{yzxy} = M_{py}^{(2)}$$

* Rank 4 tensor (sa).

$$\begin{bmatrix}
0 & T_{xxzx} & 0 \\
0 & T_{yyzx} & 0 \\
0 & T_{zzzx} & 0 \\
0 & 0 & T_{yzxy} \\
0 & 0 & 0 \\
T_{xyyz} & 0 & 0
\end{bmatrix}$$

$$T_{xxzx} = -M_{fay}^{(2)} - M_{fby}^{(2)} + M_{py}^{(3)} + 2T_{dxz}^{(5)}$$

$$T_{yyzx} = 2M_{fay}^{(2)} + M_{py}^{(3)} + 2M_{py}^{(4)}$$

$$T_{zzzx} = -M_{fay}^{(2)} + M_{fby}^{(2)} + M_{py}^{(3)} - 2T_{dxz}^{(5)}$$

$$T_{yzxy} = -M_{fay}^{(2)} + M_{fby}^{(2)} + M_{py}^{(4)} + T_{dxz}^{(5)}$$

$$T_{xyyz} = -M_{fay}^{(2)} - M_{fby}^{(2)} + M_{py}^{(4)} - T_{dxz}^{(5)}$$

* Rank 4 tensor (as).

$$\begin{bmatrix}
0 & 0 & 0 & 0 & 0 & T_{yzxy} \\
T_{zxxx} & T_{zxyy} & T_{zxzz} & 0 & 0 & 0 \\
0 & 0 & 0 & T_{xyyz} & 0 & 0
\end{bmatrix}$$

$$T_{yzxy} = -M_{fay}^{(3)} - M_{fby}^{(3)} + M_{py}^{(6)} - T_{dxz}^{(6)}$$

$$T_{zxxx} = -M_{fay}^{(3)} - M_{fby}^{(3)} + M_{py}^{(5)} + 2T_{dxz}^{(6)}$$

$$T_{zxyy} = 2M_{fay}^{(3)} + M_{py}^{(5)} + 2M_{py}^{(6)}$$

$$T_{zxzz} = -M_{fay}^{(3)} + M_{fby}^{(3)} + M_{py}^{(5)} - 2T_{dxz}^{(6)}$$

$$T_{xyyz} = -M_{fay}^{(3)} + M_{fby}^{(3)} + M_{py}^{(6)} + T_{dxz}^{(6)}$$

* Rank 4 tensor (s).

$$
\begin{bmatrix}
0 & 0 & 0 & 0 & T_{xxzx} & 0 & 0 & T_{xxxz} & 0 \\
0 & 0 & 0 & 0 & T_{yyzx} & 0 & 0 & T_{yyxz} & 0 \\
0 & 0 & 0 & 0 & T_{zzzx} & 0 & 0 & T_{zzxz} & 0 \\
0 & 0 & 0 & 0 & 0 & T_{yzxy} & 0 & 0 & T_{yzyx} \\
T_{zxxx} & T_{zxyy} & T_{zxzz} & 0 & 0 & 0 & 0 & 0 & 0 \\
0 & 0 & 0 & T_{xyyz} & 0 & 0 & T_{xyzy} & 0 & 0
\end{bmatrix}
$$

$$T_{xxzx} = 2M_{fay}^{(1)} - M_{fay}^{(2)} + 2M_{fby}^{(1)} - M_{fby}^{(2)} - 2M_{py}^{(1)} + M_{py}^{(3)} + T_{dxz}^{(1)} + 2T_{dxz}^{(2)} + T_{dxz}^{(3)} + 2T_{dxz}^{(5)} - T_{gay}^{(1)} - T_{gby}^{(1)}$$

$$T_{xxxz} = 2M_{fay}^{(1)} + M_{fay}^{(2)} + 2M_{fby}^{(1)} + M_{fby}^{(2)} - 2M_{py}^{(1)} - M_{py}^{(3)} + T_{dxz}^{(1)} + 2T_{dxz}^{(2)} + T_{dxz}^{(3)} - 2T_{dxz}^{(5)} - T_{gay}^{(1)} - T_{gby}^{(1)}$$

$$T_{yyzx} = 2M_{fay}^{(2)} - 4M_{fby}^{(1)} + M_{py}^{(3)} + 2M_{py}^{(4)} + T_{dxz}^{(1)} + T_{dxz}^{(3)} + 2T_{gby}^{(1)}$$

$$T_{yyxz} = -2M_{fay}^{(2)} - 4M_{fby}^{(1)} - M_{py}^{(3)} - 2M_{py}^{(4)} + T_{dxz}^{(1)} + T_{dxz}^{(3)} + 2T_{gby}^{(1)}$$

$$T_{zzzx} = -2M_{fay}^{(1)} - M_{fay}^{(2)} + 2M_{fby}^{(1)} + M_{fby}^{(2)} + 2M_{py}^{(1)} + M_{py}^{(3)} + T_{dxz}^{(1)} + 2T_{dxz}^{(2)} + T_{dxz}^{(3)} - 2T_{dxz}^{(5)} + T_{gay}^{(1)} - T_{gby}^{(1)}$$

$$T_{zzxz} = -2M_{fay}^{(1)} + M_{fay}^{(2)} + 2M_{fby}^{(1)} - M_{fby}^{(2)} + 2M_{py}^{(1)} - M_{py}^{(3)} + T_{dxz}^{(1)} + 2T_{dxz}^{(2)} + T_{dxz}^{(3)} + 2T_{dxz}^{(5)} + T_{gay}^{(1)} - T_{gby}^{(1)}$$

$$T_{yzxy} = 4M_{fay}^{(1)} - M_{fay}^{(2)} + M_{fby}^{(2)} + M_{py}^{(1)} + M_{py}^{(4)} + T_{dxz}^{(2)} + T_{dxz}^{(5)} + 2T_{gby}^{(1)}$$

$$T_{yzyx} = 4M_{fay}^{(1)} + M_{fay}^{(2)} - M_{fby}^{(2)} + M_{py}^{(1)} - M_{py}^{(4)} + T_{dxz}^{(2)} - T_{dxz}^{(5)} + 2T_{gby}^{(1)}$$

$$T_{zxxx} = -2M_{fay}^{(1)} - 2M_{fby}^{(1)} + 2M_{py}^{(1)} + T_{dxz}^{(1)} + 2T_{dxz}^{(2)} - T_{dxz}^{(3)} - T_{gay}^{(1)} - T_{gby}^{(1)}$$

$$T_{zxyy} = 4M_{fby}^{(1)} + T_{dxz}^{(1)} - T_{dxz}^{(3)} + 2T_{gby}^{(1)}$$

$$T_{zxzz} = 2M_{fay}^{(1)} - 2M_{fby}^{(1)} - 2M_{py}^{(1)} + T_{dxz}^{(1)} + 2T_{dxz}^{(2)} - T_{dxz}^{(3)} + T_{gay}^{(1)} - T_{gby}^{(1)}$$

$$T_{xyyz} = -4M_{fay}^{(1)} - M_{fay}^{(2)} - M_{fby}^{(2)} - M_{py}^{(1)} + M_{py}^{(4)} + T_{dxz}^{(2)} - T_{dxz}^{(5)} + 2T_{gby}^{(1)}$$

$$T_{xyzy} = -4M_{fay}^{(1)} + M_{fay}^{(2)} + M_{fby}^{(2)} - M_{py}^{(1)} - M_{py}^{(4)} + T_{dxz}^{(2)} + T_{dxz}^{(5)} + 2T_{gby}^{(1)}$$

* Rank 4 tensor (a).

$$
\begin{bmatrix}
0 & 0 & 0 & 0 & 0 & T_{yzxy} & 0 & 0 & T_{yzyx} \\
T_{zxxx} & T_{zxyy} & T_{zxzz} & 0 & 0 & 0 & 0 & 0 & 0 \\
0 & 0 & 0 & T_{xyyz} & 0 & 0 & T_{xyzy} & 0 & 0
\end{bmatrix}
$$

$$T_{yzxy} = -M_{fay}^{(3)} - M_{fby}^{(3)} + M_{py}^{(2)} + M_{py}^{(6)} + 2T_{dxz}^{(4)} - T_{dxz}^{(6)}$$

$$T_{yzyx} = -M_{fay}^{(3)} - M_{fby}^{(3)} - M_{py}^{(2)} + M_{py}^{(6)} - 2T_{dxz}^{(4)} - T_{dxz}^{(6)}$$

$$T_{zxxx} = -M_{fay}^{(3)} - M_{fby}^{(3)} + M_{py}^{(5)} + 2T_{dxz}^{(6)}$$

$$T_{zxyy} = 2M_{fay}^{(3)} + M_{py}^{(5)} + 2M_{py}^{(6)}$$

$$T_{zxzz} = -M_{fay}^{(3)} + M_{fby}^{(3)} + M_{py}^{(5)} - 2T_{dxz}^{(6)}$$

$$T_{xyyz} = -M_{fay}^{(3)} + M_{fby}^{(3)} - M_{py}^{(2)} + M_{py}^{(6)} + 2T_{dxz}^{(4)} + T_{dxz}^{(6)}$$

$$T_{xyzy} = -M_{fay}^{(3)} + M_{fby}^{(3)} + M_{py}^{(2)} + M_{py}^{(6)} - 2T_{dxz}^{(4)} + T_{dxz}^{(6)}$$

* Rank 4 tensor (t).

$$
\begin{bmatrix}
0 & 0 & T_{xxxz} \\
0 & 0 & 0 \\
T_{zzzx} & 0 & 0 \\
T_{yyzx} & 0 & 0 \\
0 & 0 & T_{zzxz} \\
0 & 0 & 0 \\
0 & 0 & 0 \\
T_{zxxx} & 0 & 0 \\
0 & 0 & T_{xyyz} \\
0 & T_{xyyz} + \frac{T_{zzxz}}{2} - \frac{T_{zzzx}}{2} & 0
\end{bmatrix}
$$

$$T_{xxxz} = T^{(1)}_{dxz} + 2T^{(2)}_{dxz} + T^{(3)}_{dxz} - 2T^{(5)}_{dxz} - T^{(1)}_{gay} - T^{(1)}_{gby}$$

$$T_{zzzx} = T^{(1)}_{dxz} + 2T^{(2)}_{dxz} + T^{(3)}_{dxz} - 2T^{(5)}_{dxz} + T^{(1)}_{gay} - T^{(1)}_{gby}$$

$$T_{yyzx} = T^{(1)}_{dxz} + T^{(3)}_{dxz} + 2T^{(1)}_{gby}$$

$$T_{zzxz} = T^{(1)}_{dxz} + 2T^{(2)}_{dxz} + T^{(3)}_{dxz} + 2T^{(5)}_{dxz} + T^{(1)}_{gay} - T^{(1)}_{gby}$$

$$T_{zxxx} = T^{(1)}_{dxz} + 2T^{(2)}_{dxz} - T^{(3)}_{dxz} - T^{(1)}_{gay} - T^{(1)}_{gby}$$

$$T_{xyyz} = T^{(2)}_{dxz} - T^{(5)}_{dxz} + 2T^{(1)}_{gby}$$