* Rank 0 tensor.

$$[T]$$

$$T = T_s^{(1)}$$

* Rank 1 tensor.

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

$$T_z = T_{pz}^{(1)}$$

* Rank 2 tensor (s).

$$\begin{bmatrix} T_{xx} & 0 & 0 \\ 0 & T_{xx} & 0 \\ 0 & 0 & T_{zz} \end{bmatrix}$$

$$T_{xx} = -T_{du}^{(1)} + T_s^{(1)}$$
$$T_{zz} = 2T_{du}^{(1)} + T_s^{(1)}$$

* Rank 2 tensor (a). * Rank 3 tensor (s).

$$\begin{bmatrix} 0 & T_{xxy} & T_{xxz} \\ 0 & -T_{xxy} & T_{xxz} \\ 0 & 0 & T_{zzz} \\ 0 & T_{yzy} & 0 \\ T_{yzy} & 0 & 0 \\ T_{xxy} & 0 & 0 \end{bmatrix}$$

$$T_{xxy} = T_{f1}^{(1)}$$
$$T_{xxz} = -T_{faz}^{(1)} + T_{pz}^{(1)}$$
$$T_{zzz} = 2T_{faz}^{(1)} + T_{pz}^{(1)} + 2T_{pz}^{(2)}$$
$$T_{yzy} = -T_{faz}^{(1)} + T_{pz}^{(2)}$$

* Rank 3 tensor (a).

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

$$T_{yzy} = T_{pz}^{(3)}$$

* Rank 4 tensor (sss).

$$\begin{bmatrix} T_{xxxx} & T_{xxyy} & T_{xxzz} & T_{xxyz} & 0 & 0 \\ T_{xxyy} & T_{xxxx} & T_{xxzz} & -T_{xxyz} & 0 & 0 \\ T_{xxzz} & T_{xxzz} & T_{zzzz} & 0 & 0 & 0 \\ T_{xxyz} & -T_{xxyz} & 0 & T_{yzyz} & 0 & 0 \\ 0 & 0 & 0 & 0 & T_{yzyz} & T_{xxyz} \\ 0 & 0 & 0 & 0 & T_{xxyz} & \frac{T_{xxxx}}{2} - \frac{T_{xxyy}}{2} \end{bmatrix}$$

$$T_{xxxx} = -2T_{du}^{(1)} - 4T_{du}^{(2)} + 3T_{g0}^{(1)} + T_s^{(1)} + 2T_s^{(2)}$$

$$T_{xxyy} = -2T_{du}^{(1)} + T_{g0}^{(1)} + T_s^{(1)}$$

$$T_{xxzz} = T_{du}^{(1)} - 4T_{g0}^{(1)} + T_s^{(1)}$$

$$T_{xxyz} = T_{gb}^{(1)}$$

$$T_{zzzz} = 4T_{du}^{(1)} + 8T_{du}^{(2)} + 8T_{g0}^{(1)} + T_s^{(1)} + 2T_s^{(2)}$$

$$T_{yzyz} = T_{du}^{(2)} - 4T_{g0}^{(1)} + T_s^{(2)}$$

* Rank 4 tensor (ssa).

$$
\begin{bmatrix}
0 & 0 & T_{xxzz} & T_{xxyz} & 0 & 0 \\
0 & 0 & T_{xxzz} & -T_{xxyz} & 0 & 0 \\
-T_{xxzz} & -T_{xxzz} & 0 & 0 & 0 & 0 \\
-T_{xxyz} & T_{xxyz} & 0 & 0 & 0 & 0 \\
0 & 0 & 0 & 0 & 0 & -T_{xxyz} \\
0 & 0 & 0 & 0 & T_{xxyz} & 0
\end{bmatrix}
$$

$$T_{xxzz} = 3T_{du}^{(3)}$$

$$T_{xxyz} = 2M_{f2}^{(1)}$$

* Rank 4 tensor (aas).

$$
\begin{bmatrix}
T_{yzyz} & 0 & 0 \\
0 & T_{yzyz} & 0 \\
0 & 0 & T_{xyxy}
\end{bmatrix}
$$

$$T_{yzyz} = -2T_{du}^{(4)} + T_s^{(3)}$$

$$T_{xyxy} = 4T_{du}^{(4)} + T_s^{(3)}$$

* Rank 4 tensor (aaa). * Rank 4 tensor (sa).

$$
\begin{bmatrix}
T_{xxyz} & 0 & 0 \\
-T_{xxyz} & 0 & 0 \\
0 & 0 & 0 \\
T_{yzyz} & 0 & 0 \\
0 & -T_{yzyz} & 0 \\
0 & -T_{xxyz} & 0
\end{bmatrix}
$$

$$T_{xxyz} = M_{f2}^{(2)}$$

$$T_{yzyz} = -3T_{du}^{(5)}$$

* Rank 4 tensor (as).

$$
\begin{bmatrix}
T_{yzxx} & -T_{yzxx} & 0 & T_{yzyz} & 0 & 0 \\
0 & 0 & 0 & 0 & -T_{yzyz} & -T_{yzxx} \\
0 & 0 & 0 & 0 & 0 & 0
\end{bmatrix}
$$

$$T_{yzxx} = M_{f2}^{(3)}$$

$$T_{yzyz} = -3T_{du}^{(6)}$$

* Rank 4 tensor (s).

$$
\begin{bmatrix}
T_{xxxx} & T_{xxyy} & T_{xxzz} & T_{xxyz} & 0 & 0 & T_{xxzy} & 0 & 0 \\
T_{xxyy} & T_{xxxx} & T_{xxzz} & -T_{xxyz} & 0 & 0 & -T_{xxzy} & 0 & 0 \\
T_{zzxx} & T_{zzxx} & T_{zzzz} & 0 & 0 & 0 & 0 & 0 & 0 \\
T_{yzxx} & -T_{yzxx} & 0 & T_{yzyz} & 0 & 0 & T_{yzzy} & 0 & 0 \\
0 & 0 & 0 & 0 & T_{yzzy} & T_{yzxx} & 0 & T_{yzyz} & T_{yzxx} \\
0 & 0 & 0 & 0 & T_{xxzy} & \frac{T_{xxxx}}{2} - \frac{T_{xxyy}}{2} & 0 & T_{xxyz} & \frac{T_{xxxx}}{2} - \frac{T_{xxyy}}{2}
\end{bmatrix}
$$

$$T_{xxxx} = -2T_{du}^{(1)} - 4T_{du}^{(2)} + 3T_{g0}^{(1)} + T_s^{(1)} + 2T_s^{(2)}$$
$$T_{xxyy} = -2T_{du}^{(1)} + T_{g0}^{(1)} + T_s^{(1)}$$
$$T_{xxzz} = T_{du}^{(1)} + 3T_{du}^{(3)} - 4T_{g0}^{(1)} + T_s^{(1)}$$
$$T_{xxyz} = 2M_{f2}^{(1)} + M_{f2}^{(2)} + T_{gb}^{(1)}$$
$$T_{xxzy} = 2M_{f2}^{(1)} - M_{f2}^{(2)} + T_{gb}^{(1)}$$
$$T_{zzxx} = T_{du}^{(1)} - 3T_{du}^{(3)} - 4T_{g0}^{(1)} + T_s^{(1)}$$
$$T_{zzzz} = 4T_{du}^{(1)} + 8T_{du}^{(2)} + 8T_{g0}^{(1)} + T_s^{(1)} + 2T_s^{(2)}$$
$$T_{yzxx} = -2M_{f2}^{(1)} + T_{gb}^{(1)}$$
$$T_{yzyz} = T_{du}^{(2)} - 3T_{du}^{(5)} - 4T_{g0}^{(1)} + T_s^{(2)}$$
$$T_{yzzy} = T_{du}^{(2)} + 3T_{du}^{(5)} - 4T_{g0}^{(1)} + T_s^{(2)}$$

* Rank 4 tensor (a).

$$\begin{bmatrix} T_{yzxx} & -T_{yzxx} & 0 & T_{yzyz} & 0 & 0 & T_{yzzy} & 0 & 0 \\ 0 & 0 & 0 & 0 & -T_{yzzy} & -T_{yzxx} & 0 & -T_{yzyz} & -T_{yzxx} \\ 0 & 0 & 0 & 0 & 0 & T_{xyxy} & 0 & 0 & -T_{xyxy} \end{bmatrix}$$

$$T_{yzxx} = M_{f2}^{(3)}$$
$$T_{yzyz} = -2T_{du}^{(4)} - 3T_{du}^{(6)} + T_s^{(3)}$$
$$T_{yzzy} = 2T_{du}^{(4)} - 3T_{du}^{(6)} - T_s^{(3)}$$
$$T_{xyxy} = 4T_{du}^{(4)} + T_s^{(3)}$$

* Rank 4 tensor (t).

$$\begin{bmatrix} T_{xxxx} & 0 & 0 \\ 0 & T_{xxxx} & T_{yyyz} \\ 0 & 0 & T_{zzzz} \\ 0 & T_{yyyz} & T_{yyzz} \\ T_{zzxx} & 0 & 0 \\ 0 & T_{xxyy} & -T_{yyyz} \\ 0 & T_{yzzy} & 0 \\ 0 & -T_{yyyz} & -\frac{T_{xxxx}}{2} + \frac{3T_{xxyy}}{2} + T_{yyzz} - T_{yzzy} + T_{zzxx} \\ \frac{T_{xxxx}}{2} - \frac{T_{xxyy}}{2} & 0 & 0 \\ -T_{yyyz} & 0 & 0 \end{bmatrix}$$

$$T_{xxxx} = -2T_{du}^{(1)} - 4T_{du}^{(2)} + 3T_{g0}^{(1)} + 3T_s^{(1)}$$
$$T_{yyyz} = -T_{gb}^{(1)}$$
$$T_{zzzz} = 4T_{du}^{(1)} + 8T_{du}^{(2)} + 8T_{g0}^{(1)} + 3T_s^{(1)}$$
$$T_{yyzz} = T_{du}^{(1)} + 3T_{du}^{(3)} - 4T_{g0}^{(1)} + T_s^{(1)}$$
$$T_{zzxx} = T_{du}^{(1)} - 3T_{du}^{(3)} - 4T_{g0}^{(1)} + T_s^{(1)}$$
$$T_{xxyy} = -2T_{du}^{(1)} + T_{g0}^{(1)} + T_s^{(1)}$$
$$T_{yzzy} = T_{du}^{(2)} + 3T_{du}^{(5)} - 4T_{g0}^{(1)} + T_s^{(1)}$$