

* Rank 0 tensor. * Rank 1 tensor.

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

$$M_z = M_{pz}^{(1)}$$

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

$$\begin{bmatrix} 0 & M_{xy} & 0 \\ -M_{xy} & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$$

$$M_{xy} = T_{pz}^{(1)}$$

* Rank 3 tensor (s).

$$\begin{bmatrix} M_{xxx} & 0 & M_{xxz} \\ -M_{xxx} & 0 & M_{xxz} \\ 0 & 0 & M_{zzz} \\ 0 & M_{yzy} & 0 \\ M_{yzy} & 0 & 0 \\ 0 & -M_{xxx} & 0 \end{bmatrix}$$

$$M_{xxx} = M_{f2}^{(1)}$$

$$M_{xxz} = -M_{faz}^{(1)} + M_{pz}^{(1)}$$

$$M_{zzz} = 2M_{faz}^{(1)} + M_{pz}^{(1)} + 2M_{pz}^{(2)}$$

$$M_{yzy} = -M_{faz}^{(1)} + M_{pz}^{(2)}$$

* Rank 3 tensor (a).

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

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

* Rank 4 tensor (sss).

$$\begin{bmatrix} 0 & 0 & 0 & M_{xyz} & 0 & 0 \\ 0 & 0 & 0 & -M_{xyz} & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \\ M_{xyz} & -M_{xyz} & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & M_{xyz} \\ 0 & 0 & 0 & 0 & M_{xyz} & 0 \end{bmatrix}$$

$$M_{xyz} = M_{gb}^{(1)}$$

* Rank 4 tensor (ssa).

$$\begin{bmatrix} 0 & 0 & 0 & M_{xyz} & 0 & M_{xxy} \\ 0 & 0 & 0 & -M_{xyz} & 0 & -M_{xxy} \\ 0 & 0 & 0 & 0 & 0 & 0 \\ -M_{xyz} & M_{xyz} & 0 & 0 & M_{yzz} & 0 \\ 0 & 0 & 0 & -M_{yzz} & 0 & -M_{xyz} \\ -M_{xxy} & M_{xxy} & 0 & 0 & M_{xyz} & 0 \end{bmatrix}$$

$$\begin{aligned}
M_{xxyz} &= 2T_{f2}^{(1)} \\
M_{xxxy} &= -2T_{faz}^{(1)} + 2T_{pz}^{(1)} \\
M_{yzzx} &= -4T_{faz}^{(1)} - T_{pz}^{(1)}
\end{aligned}$$

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

$$\begin{bmatrix} 0 & M_{yzzx} & 0 \\ -M_{yzzx} & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$$

$$M_{yzzx} = -T_{pz}^{(2)}$$

* Rank 4 tensor (sa).

$$\begin{bmatrix} M_{xxyz} & 0 & M_{xxxy} \\ -M_{xxyz} & 0 & M_{xxxy} \\ 0 & 0 & M_{zzxy} \\ 0 & M_{yzzx} & 0 \\ M_{yzzx} & 0 & 0 \\ 0 & -M_{xxyz} & 0 \end{bmatrix}$$

$$\begin{aligned}
M_{xxyz} &= T_{f2}^{(2)} \\
M_{xxxy} &= -T_{faz}^{(2)} + T_{pz}^{(3)} \\
M_{zzxy} &= 2T_{faz}^{(2)} + T_{pz}^{(3)} + 2T_{pz}^{(4)} \\
M_{yzzx} &= -T_{faz}^{(2)} + T_{pz}^{(4)}
\end{aligned}$$

* Rank 4 tensor (as).

$$\begin{bmatrix} M_{yzxx} & -M_{yzxx} & 0 & 0 & M_{yzzx} & 0 \\ 0 & 0 & 0 & M_{yzzx} & 0 & -M_{yzxx} \\ M_{xyxx} & M_{xyxx} & M_{xyzz} & 0 & 0 & 0 \end{bmatrix}$$

$$\begin{aligned}
M_{yzxx} &= T_{f2}^{(3)} \\
M_{yzzx} &= -T_{faz}^{(3)} + T_{pz}^{(6)} \\
M_{xyxx} &= -T_{faz}^{(3)} + T_{pz}^{(5)} \\
M_{xyzz} &= 2T_{faz}^{(3)} + T_{pz}^{(5)} + 2T_{pz}^{(6)}
\end{aligned}$$

* Rank 4 tensor (s).

$$\begin{bmatrix} 0 & 0 & 0 & M_{xxyz} & 0 & M_{xxxx} & M_{xxzy} & 0 & M_{xxyx} \\ 0 & 0 & 0 & -M_{xxyz} & 0 & -M_{xxyx} & -M_{xxzy} & 0 & -M_{xxxx} \\ 0 & 0 & 0 & 0 & 0 & M_{zzxy} & 0 & 0 & -M_{zzxy} \\ M_{yzxx} & -M_{yzxx} & 0 & 0 & M_{yzzx} & 0 & 0 & M_{yzxz} & 0 \\ 0 & 0 & 0 & -M_{yzzx} & 0 & M_{yzxx} & -M_{yzzx} & 0 & M_{yzxx} \\ -\frac{M_{xxxx}}{2} - \frac{M_{xxyx}}{2} & \frac{M_{xxxy}}{2} + \frac{M_{xxyx}}{2} & 0 & 0 & M_{xxzy} & 0 & 0 & M_{xxyz} & 0 \end{bmatrix}$$

$$\begin{aligned}
M_{xxyz} &= M_{gb}^{(1)} + 2T_{f2}^{(1)} + T_{f2}^{(2)} \\
M_{xxxy} &= -2T_{faz}^{(1)} - T_{faz}^{(2)} + 2T_{pz}^{(1)} + T_{pz}^{(3)} \\
M_{xxzy} &= M_{gb}^{(1)} + 2T_{f2}^{(1)} - T_{f2}^{(2)} \\
M_{xxyx} &= -2T_{faz}^{(1)} + T_{faz}^{(2)} + 2T_{pz}^{(1)} - T_{pz}^{(3)} \\
M_{zzxy} &= 2T_{faz}^{(2)} + T_{pz}^{(3)} + 2T_{pz}^{(4)} \\
M_{yzxx} &= M_{gb}^{(1)} - 2T_{f2}^{(1)} \\
M_{yzzx} &= -4T_{faz}^{(1)} - T_{faz}^{(2)} - T_{pz}^{(1)} + T_{pz}^{(4)} \\
M_{yzzz} &= -4T_{faz}^{(1)} + T_{faz}^{(2)} - T_{pz}^{(1)} - T_{pz}^{(4)}
\end{aligned}$$

* Rank 4 tensor (a).

$$\begin{bmatrix} M_{yzxx} & -M_{yzxx} & 0 & 0 & M_{yzzx} & 0 & 0 & M_{yzxz} & 0 \\ 0 & 0 & 0 & M_{yzxz} & 0 & -M_{yzxx} & M_{yzzx} & 0 & -M_{yzxx} \\ M_{xyxx} & M_{xyxx} & M_{xyzx} & 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix}$$

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

$$M_{yzzx} = -T_{faz}^{(3)} - T_{pz}^{(2)} + T_{pz}^{(6)}$$

$$M_{yzxz} = -T_{faz}^{(3)} + T_{pz}^{(2)} + T_{pz}^{(6)}$$

$$M_{xyxx} = -T_{faz}^{(3)} + T_{pz}^{(5)}$$

$$M_{xyzx} = 2T_{faz}^{(3)} + T_{pz}^{(5)} + 2T_{pz}^{(6)}$$

* Rank 4 tensor (t).

$$\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & M_{yyyyz} \\ 0 & 0 & 0 \\ 0 & M_{yyyyz} & 0 \\ 0 & 0 & 0 \\ 0 & 0 & -M_{yyyyz} \\ 0 & 0 & 0 \\ 0 & -M_{yyyyz} & 0 \\ 0 & 0 & 0 \\ -M_{yyyyz} & 0 & 0 \end{bmatrix}$$

$$M_{yyyyz} = -M_{gb}^{(1)}$$