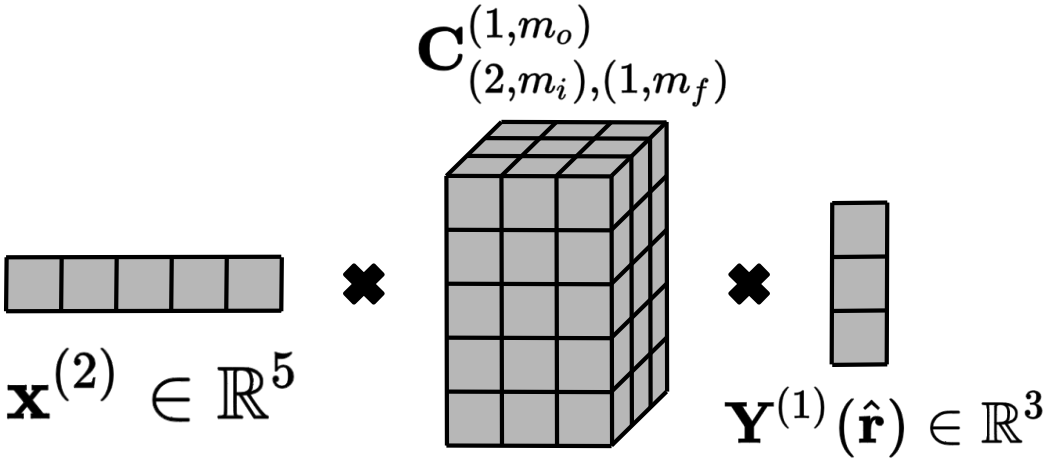
$\mathbf{C}^{(1,m_o)}_{(2,m_i),(1,m_f)}$
$\mathbf{x}^{(2)} \in \mathbb{R}^5$
$\mathbf{Y}^{(1)}(\hat{\mathbf{r}}) \in \mathbb{R}^3$