$$F^{s_x}_{\ell\ell' L'} \stackrel{\text{def}}{=} \left[-\ell\left(\ell+1\right)+\ell'\left(\ell'+1\right)+L'\left(L'+1\right)\right]\sqrt{\frac{\left(2\ell+1\right)\left(2\ell'+1\right)\left(2L'+1\right)}{16\pi}}\begin{pmatrix} \ell & \ell' & L' \\ -s_x & s_x & 0 \end{pmatrix} \tag{1}$$

$$\Theta(\hat{\mathbf{n}}), Q(\hat{\mathbf{n}}), U(\hat{\mathbf{n}}) \tag{2}$$

$$Q \pm iU \rightarrow e^{\pm 2i\theta}(Q \pm iU) \tag{3}$$

$$\Theta \rightarrow \Theta \tag{4}$$

$$\Theta(\hat{n}) = \sum_{\ell m} a_{T,\ell m} Y^m_\ell(\hat{n}) \tag{5}$$

$$Q \pm iU \rightarrow e^{\pm 2i\theta}(Q \pm iU) \tag{6}$$

$$(Q \pm iU)(\hat{n}) = \sum_{\ell m} \left(-a_{E,\ell m} \mp i a_{B,\ell m}\right)_2 Y^m_\ell(\hat{n}) \tag{7}$$

$$\left\langle a^m_l b^{m'}_{l'} \right\rangle = C^{ab}_l \delta_{ll'} \delta_{m-m'} (-1)^m \tag{8}$$