

$$\mathcal{F}_l = \frac{2l+1}{2} \sum_{i=0}^{N_p} \frac{4\pi}{2l+1} \sum_{m=-l}^l \sum_{j=0}^{|B^i|} Y_{l,m}(\hat{r}_j) \sum_{k=0}^{|C^i|} Y_{l,m}^*(\hat{r}_k)$$