

$$\left. (1 + P_\gamma) \left| \sum_{\ell, m} [\ell]_{m; k}^{(+)} \Re[Z_\ell^m(\Omega, \Phi)] \right|^2 + (1 + P_\gamma) \left| \sum_{\ell, m} [\ell]_{m; k}^{(-)} \Im[Z_\ell^m(\Omega, \Phi)] \right|^2 \right\}$$