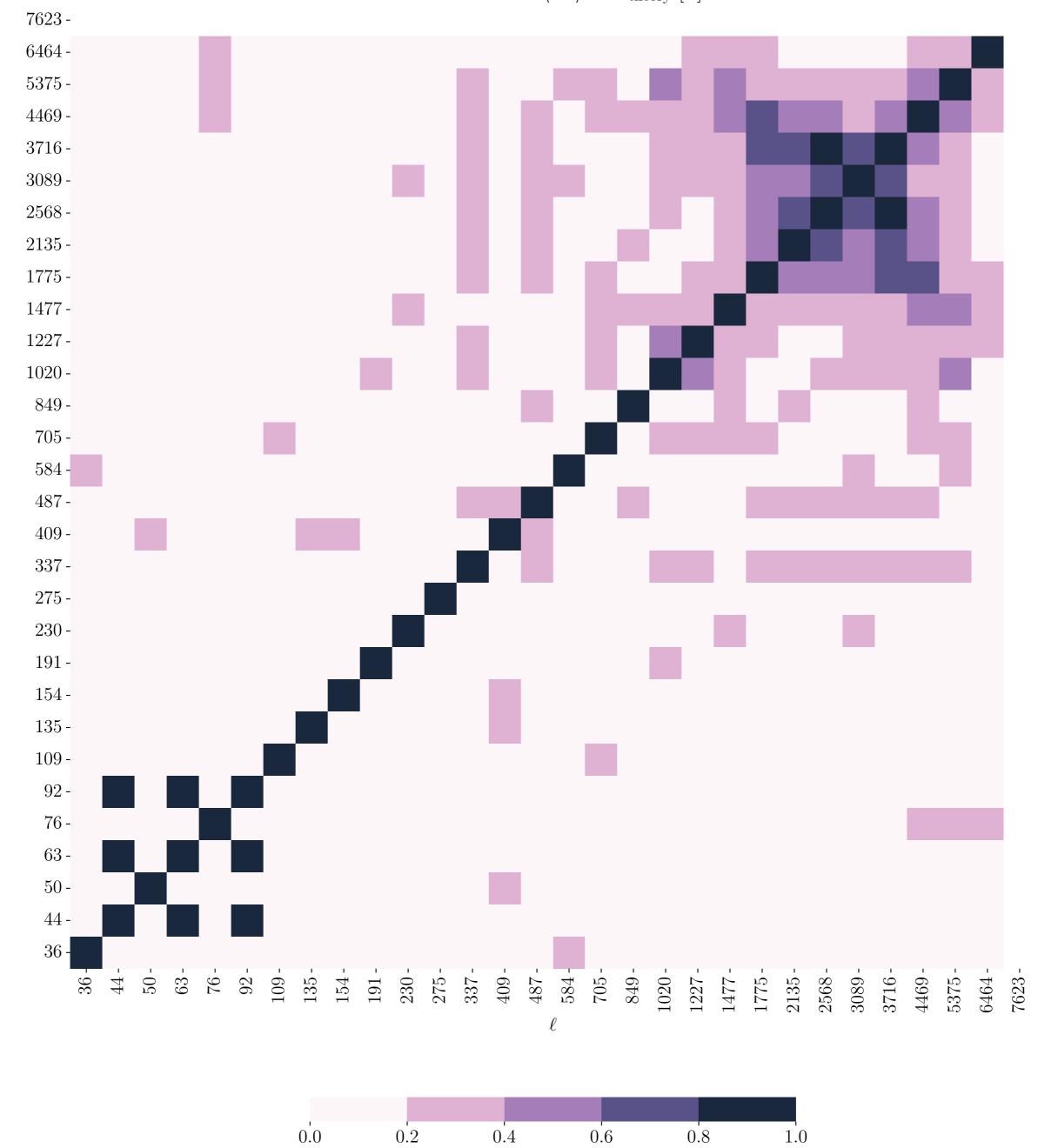Correlation for $\langle \hat{\kappa}\hat{\kappa} \rangle - N_{\mathrm{theory}}$ [L]