- Figures 1 & 2 show the effect of varying the optical depth due to reionization, τ. Scattering of CMB photons from electrons in the reionization epoch smoothes out anisotropy at smaller comoving scales than the distance photons have traveled between decoupling and reionization. Therefore the C_ℓ spectra are damped at larger ℓ. This rescattering also generates additional polarization to the CMB, which shows prominently at the large scales (small ℓ), at which there was very little polarization power from the photon decoupling era, as a <u>reionization peak</u> in the C_ℓ^{EE} (see the loglog plots in Fig. 2).

- Figures 3 and 4 show the C_ℓ for vector and tensor perturbations with the reference background cosmological model. These are for scale-invariant primordial spectra ($n_t = 0$ for tensors, in the convention of Eq. T5.47). The amplitudes have been chosen arbitrarily, so do not pay attention to the overall level of the spectra, just their shape and the relative levels between C_ℓ^{TT}, C_ℓ^{EE}, C_ℓ^{BB}, C_ℓ^{TE} are relevant.

  Figure 4 shows the ratio C_ℓ^{BB}/C_ℓ^{EE}. We see how vector perturbations produce much stronger B mode than E mode, whereas for tensor perturbations the B mode is slightly weaker than the E mode. This effect is independent of the cosmological model (although the detailed shape of C_ℓ^{BB}/C_ℓ^{EE} will of course vary), since B and E mode polarization have the same source, $\mathcal{P}^{(m)}$, and the different powers result from the difference between the radial functions $\mathcal{E}_\ell^m(k\eta_0 - k\eta)$ and $\mathcal{B}_\ell^m(k\eta_0 - k\eta)$, see Eq. (4.12,13).