

L10. CAMB Plots of C_L

- The following figures show the C_L^{TT} , C_L^{EE} , C_L^{BB} , C_L^{TE} angular power spectra for various cosmological models, calculated with CAMB.^{*} We have chosen as a reference model one with only scalar perturbations, and with the background universe cosmological parameters

$$\Omega_0 = 1 \quad \omega_m = 0.147 \quad \tau = 0.1$$

$$\Omega_\Lambda = 0.7 \quad \omega_b = 0.022$$

(the same as in Cosmology II §12.9; these correspond to $H_0 = 70$ km/s/Mpc; H_0 is a dependent parameter, which changes when Ω_0 , Ω_Λ , or ω_m is changed) and the perturbation parameters (scalar primordial power spectrum amplitude A and spectral index n_s)

$$A = \text{something to make the plots roughly match WMAP data}$$

$$n_s = 1.0$$

- Note that the plots have various lin/log combinations of axes to bring out different effects. They are also in temperature units, i.e., the C_L have been multiplied by $T_0^2 = (2.725 \times 10^6 \mu\text{K})^2$.^{**}
- Note also that scalar perturbations do not give B mode polarization (except for higher order effects, especially lensing, see below). Therefore most figures do not show C_L^{BB} .

***) and the same C_L appear with different lin/log axes in Figure pairs.

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