

Initial Conditions

- Prepare 128^3 magnetic field initial conditions dataset in k-space (Fourier space) with following properties
 - Solenoidal
$$\nabla \cdot B(k) = 0$$
 - Mean field in z direction
$$B = B_0 \hat{z}$$
 - omnidirectional spectrum begins at largest wavelength with positive slope until it reaches wavenumber k_0 such that it follows Kolmogorov type power law that holds until Nyquist wavenumber
 - Energy in fluctuations = 1
$$b_x^2 + b_y^2 = 1$$