

Table 1: Summary of the runs discussed in the paper.

Run	$i$	$\mathcal{E}_i^{\max}$	$\sigma$	$\mathcal{E}_{\text{GW}}^{\text{sat}}$	$q$
B	Ka	$2.4 \times 10^{-3}$	0	$1.6 \times 10^{-8}$	32
F	Mv	$1.7 \times 10^{-2}$	1	$5.1 \times 10^{-9}$	2.5

Runs B and F from Sayan paper. Driving during  $1 < t < 2$ . Run B for irrotational turbulence produced by plane wave forcing, and Run F with magnetic forcing and helicity (black is total energy, i.e., kinetic and magnetic energies). Spectra are plotted during  $1.9 < t < 2$ .

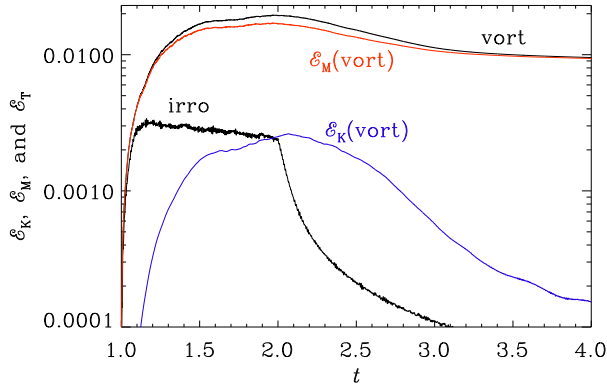


Figure 1: Initial growth is very fast, but similar in both cases.

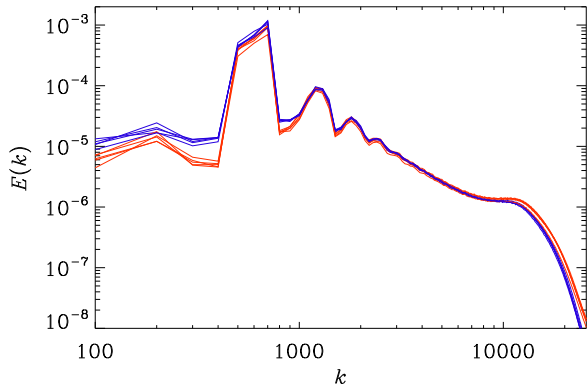


Figure 2: Run B kinetic energy spectrum (blue) and density spectrum (red), but multiplied by 0.14.

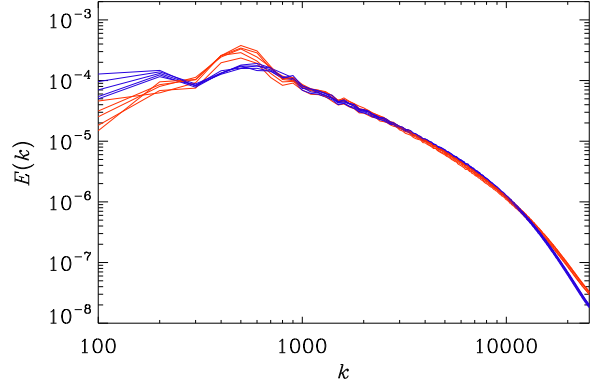


Figure 3: Run F kinetic energy spectrum (blue) and density spectrum (red), but multiplied by 2.2.

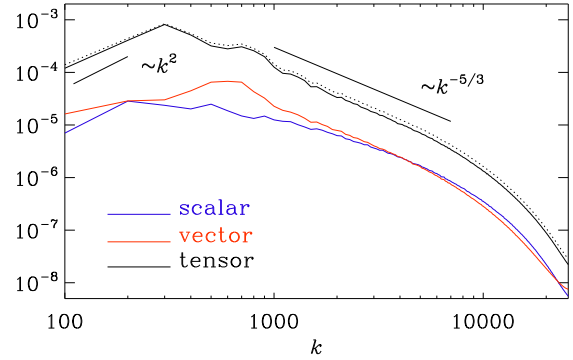
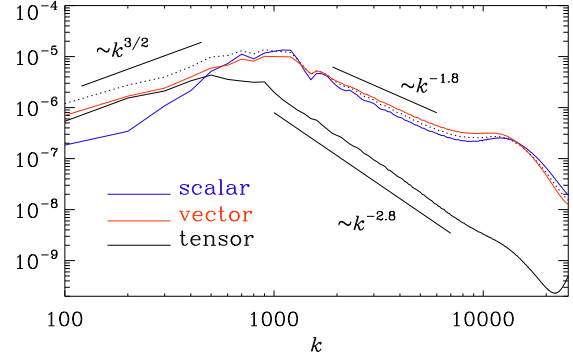


Figure 4: SVT decomposition for Run B (top) for irrotational turbulence produced by plane wave forcing, and Run F (bottom) with magnetic forcing and helicity.

For irrotational turbulence, most of the power comes from the lowest wavenumbers. This raises the question how sensitive the results are to the lowest wavenumber in the domain.

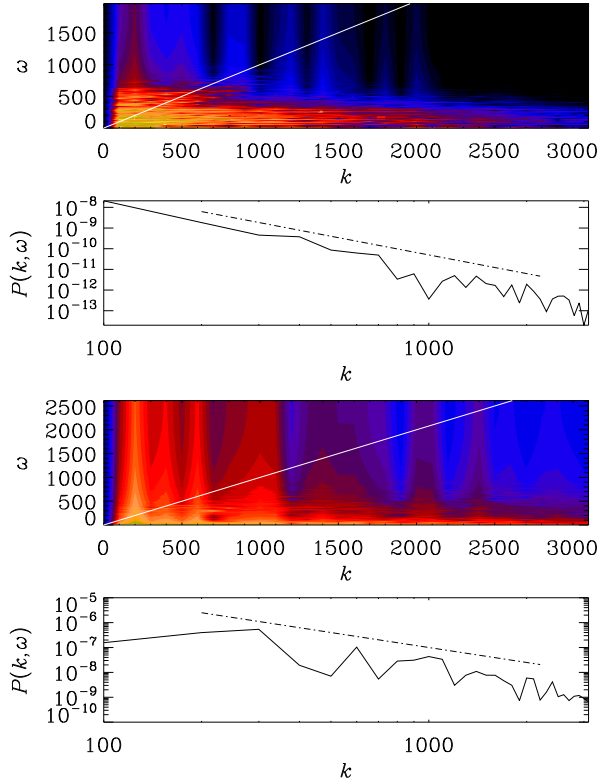


Figure 5:  $k\omega$  diagram for Run B (top) for irrotational turbulence produced by plane wave forcing, and Run F (bottom) with magnetic forcing and helicity. The fit is proportional to  $k^{-3}$  for Run B and proportional to  $k^{-2}$  for Run F.