This document describes the process to generate the turbulence files that Gadget2 will read.

**turbulence\_generator.py**

Parameters:

* n\_velocity\_components: the number of dimensions of the velocity field
* grid\_dim = number of 1D lattice points of the turbulence box. Here, I used 129, so that I can include the end points for the larger simulation box.
* n = Index of the power spectrum

To generate a file of turbulence, simply run in the Terminal “python turbulence\_generator.py”.

However, we need to modify this file a bit.