Pete Rigas, McMahon Lab Posts

- Tuesday, January 21: Introduce focus of project on Navier-Stokes

- Monday, February 2: Attached a short PDF to discuss the general form of the equations, in addition to sampling routines

- Friday, February 7: Posted a discussion relating to the Trotterized expansion used for the time evolution of Lubasch et al, and remarks on the construction of a Hamiltonian (shown in the final report which I want to include in an update of the draft) for the ground states that we would expect from a Hamiltonian whose coupling constants are algebraically decaying with respect to the distance.

- Friday, February 21: Attached a PDF to the channel which introduced details of the sampling process, with numerical quantities that can be further explored with read out from Navier-Stokes of the Lubasch et al variational algorithm.

- Monday, February 24, Wednesday, February 26 & Tuesday, March 3: Answered questions from Professor McMahon & group members Thomas and Leeseok from the previous February 21 post.

- Monday, March 16: Attached short presentation for the lab which explained the sampling process, construction of sampling ensembles, and discussed particular analytical solutions to Navier-Stokes.

- Wednesday, March 25: Introduced Python to start constructing sampling ensembles, screen recording of output from which I pushed code to personal Github.

- Monday, April 13: Attached plots of sampling process, observe noticeable differences to the distribution of samples as the mean and the variance are continuously tuned.

- Sunday, April 19: Introduced and studied 3 cases of sampling mean and variance.

- Monday, April 27: Pushed code to lab Github, and introduced plots included in the final report relating to work in the previous post.

- Tuesday, May 5: Described output from the sampling process, and attempted constructing couplings to measure interactions of turbulence over short and long range scales.

- Monday, May 18: Introduced references included in the final report for SS20.