

TUESDAY

APRIL 12

12:30 P.M.

RM 184 NSH

## Astrophysical Turbulence from a Different Perspective

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Many astrophysical fluids are in turbulent state. To maintain turbulence, energy must be injected into the fluids. In turbulence simulations, it is customary to drive the fluids on a scale comparable to the computational domain. In this talk, I will consider how statistics of turbulence is changed when we do not follow the conventional approach. First, I will talk about the effects of the driving scale. When we drive turbulence on a small scale, some turbulence statistics changes. I will discuss in detail how the Chandrasekhar-Fermi method is affected by the small-scale driving. I will also discuss the consequence of small-scale driving on the growth of a localized seed magnetic field in the intracluster medium. Second, I will briefly discuss the effects of two-scale driving and other issues related to driving mechanisms.

A related paper: Cho & Yoo (2016), ArXiv 1603.08537

( <http://adsabs.harvard.edu/abs/2016arXiv160308537C> )