

Project

- A project, related at least loosely to the theme(s) of the course, is required.
- Projects need not be original, but should **not** be a book report. Independent organization and analysis are required.
- 5-7 pages + figures. Due last class.
- Collaboration and coordination are OK, but each write-up should be distinct and independent.
- Possible topics include, but not limited to:
 - Financial models and their shortcomings, market crashes
 - Turbulence, turbulent mixing
 - Clustering and aggregation processes, mechanisms
 - Transport in biological systems
 - Phase separation; transition dynamics, spinodal decomposition
 - Noisy traffic flow
 - Flocking
 - Multiplicative noise processes
 - Galactic evolution, collisions
 - Collisionless relaxation
 - Statistical physics of wildfires
 - Physics of molecular biological motors
 - Self-organized criticality and its models, especially continuum
- Students should discuss and OK project topics with the Instructor.
- Topics should be OK'd prior to Thanksgiving holiday.