

PHY 688 (Special Topics in Astro)

Astrophysical Fluids and Plasmas

- topics:

- the equations of hydrodynamics
- viscous flows
- gas dynamics
- instabilities
- turbulence
- numerical methods for hydrodynamics
- reactive flows
- self-gravitating and rotation flows
- introduction to MHD

- logistics

- ~ first $\frac{1}{2}$ of the course will be analytic discussions w/ applications to astro
- ~ $\frac{1}{4}$ of the class will focus on numerical methods for hydro
- traditional problem sets + computational projects
- each student give a short presentation on a topic related to the course

- course info

- instructor: Michael Zingale
- Spring 2018
- M/W 10:00 – 11:20am