## Homework set 01. AST 233, Spring 2020

## Due date: Tuesday Jan 28 in class.

On order of magnitude estimates.

- 1. Chose 4 problems of order of magnitude
  type from Lecture notes 1 to work on. http:
   //astro.pas.rochester.edu/~aquillen/
   ast233/lectures/lecture1.pdf
- 2. Work on an order of magnitude problem of your own!
- 3. Chose one of the following to review and describe:
  - Buckingham Pi Theorem
  - Dimensionless numbers relevant in fluid dynamics.
  - A dimensionless number that is relevant for an instability.
  - Dimensionless numbers relevant for impact crater formation.
  - Dimensionless numbers relevant for accretion flows.
- 4. Be prepared to describe one of your problems at the black board.