1   Introduction to Gradescope

This is a practice run for using Gradescope, and a chance to for the instructor to learn more about you.

(a) What name do you prefered to be called by? If you want, please share your pronouns too.

(b) If the pronunication of your name is possibly confusing, please describe how I should pronounce your name? (for example, my last name, "Gire", is pronouced the same as "jeery"). Please correct me if I mispronounce your name!

(c) Do you have any concerns about this course?

(d) Is there anything else that you'd like to share about yourself?

You can type your answers or write by hand.

Create a **PDF** of your answers. You can use the scanner function of your cell phone camera, or use the scanner in 304F. Please note, JPEG scans are harder to read (and much larger file size).

Upload the PDF to Gradescope using the Gradescope tab in Canvas. On Gradescope, you will be prompted to associate submitted pages with problem numbers. You may associate multiple problems with the same page if appropriate.

If you have a problems with this process, please contact a member of the teaching team.

2   Scale reading assignment

Read this 3 page excerpt from the book "Scale" by Geoffrey West, then answer the following questions:

(a) When modeling the motion of a planet, what is a property of the planet we can ignore without causing significant error? Conversely, what is a property of the planet we cannot ignore if we wish to predict the planet's motion?

(b) This excerpt describes a "toy model" of a gas. The model is considered "coarse grained" because it ignores many fine-grained details. List one or more physical properties of gas molecules that the toy model ignores.

(c) Why do physicists use toy models and zeroth-order approximations?