Outline

* Statement of problem
  + Fnet = things
* Why I used Runge Kutta method
  + Complicated potential, easy to implement in RK4
* Adaptive time step
  + Have to pick the worst time step
  + Adjust to error
  + Have to do x and y error
* Design considerations
  + JSON files for easily adjusting the bodies
  + Sun is stuck in the center
    - A specific object called Sun is not moved
  + Writes directly to a csv file
    - Doesn’t hold the data so it doesn’t slow down

The interactions of the solar system can be written as

Where the second line is easier to use for a numerical simulation.