

# Physics 503: Scientific Computing

## Mid-Term Project Instructions

- Proposal
  - Pick a topic that is interesting to you and (hopefully) helpful to your current research
  - Be careful that your project is not trivial (like a homework assignment), but not so complicated that you have no hope of success.
  - Prepare a ~1 page proposal for your project to turn in. This should include a description of the project and discussion on how you plan to solve it.
- Project Output
  - The project code should be nicely structured with plenty of comments and docstrings. As with homeworks, turn in both a working .py file and a .pdf file for my comments.
  - You also need to prepare a ~ 5 page paper similar to a brief journal article which introduces your project, addresses motivation (why solve this?). It should have a section on your implementation of the solution – difficult problems you had to solve. Also discuss the results – show sample output. Finally have a conclusion which addresses the limitations of your code and how it could be improved in the future.
  - The paper should ‘look like’ a professional document – formatting, equations, figures, tables, references, ...
- See me for questions!!
- **Final projects are due March 28.**