2021 Project Schedule

Schedule:

- Tuesday March 23 and Thursday March 25 : Set up teams of 2-3 each.
- Tuesday March 30 and April 1 : Present Team Project Plan: Who is responsible for what. 4 slides.
- Mid Project review discussion in class April 13 or 15
- Project due date **Wednesday April 27**: Code and Written report, contribution and team assessment.
- April 27 & 29 : Final Project Presentation via Slides: 30 min maximum each team.

Project Requirements.

- Each team must have a GitHUB for the code with instruction to test it and directories for slides, the report and references.
- Each team must write their own code and go in different directions. However sharing ideas betwen the teams during the Lectures is ok – in fact encouraged.
- The basic ingredient of the project should ideally include:
  - Problem statement, tasks and goals with a 4 -5 slide proposal.
  - Statement of the equations to solve and the basic algorithm.
  - An assessment of algorithm efficiency and error of results.
  - An example of parallelization by either openACC or MPI or both.
  - A graphics and performance metrics for results. This can include both successes and difficulties in obtaining good performance.
- Final project should be written up in a short report (well written less than 10 pages, shorter can be better) and set of slides for the oral presentation. Written report should include references and acknowledgement of individual team member's contributions to project.

Project Topic: The topic is flexible so you should do research on this topic and pick a realistic goal given what the course has taught and teams talents. Example of projects will be posted on GitHUB. **In the remaining meetings there will be a lot of hands on help in the Lab to suggest solutions.** Each project should include some use of MPI and/or openMP to speed up the problem and a discussion of performance and accuracy. Part of the report can be library research on more advance methods that you might pursue if you were to take on this professionally!