Computational Fluid Dynamics (ME EN 6720)

Project 2, Spring 2016

Project Proposal Due Tuesday April 5th

Project Presentation Due Tuesday April 29th

Project Report Due Friday April 29th

Project #2

For Project #2 you are required to explore a fluid dynamics problem of your choice using CFD. Specifically your project should include at least a 2D solution of the Navier-Stokes equations or an associated equation set of equivalent complexity. The only requirements are that the project must include your own numerical code (it can be derived from your Project #1 numerical code) or must contain a significantly novel aspect and it must be an individual project.

Results Due

\bullet April 5^{th} : Project Proposal

The project summary should be a 1 paragraph (maximum) summary of your proposed project topic and main objective. If you are unsure of the appropriateness of your project, please contact the course instructor.

• April 29th: Project Presentations

The scheduled final exam day (April 29th) will be used for project presentations. Presentations will be 6 minutes long with 1 minute for questions and presenter transitions. Your presentations will be due to me no later than 1 hour before the start of class on the presentation day. Presentations in power point or as Adobe PDFs are preferred but other formats will be accommodated provided you inform the instructor at least 24 hours before your presentation (so that arrangements can be made).

- $\underline{April~29^{th}}$: Project Report

The project report should be presented in the form of a short conference paper. Use the ASME conference paper format (double column, 10 pt font) as general guidelines for how to format your report. The guidelines and templates can be found online at:

http://www.asme.org/knowledgebase/proceedings/author-guidelines

Your report should be concise and no more than 5 pages (not including an appendix of your numerical code or additional figures). Their is no minimum length but your paper should contain all of the elements of a well presented conference paper and clearly state what your project topic was, how you approached it, and the key results.