

Project Title

Name of the Contributor
Contributor affiliation

Synopsis

Synopsis of the research migration project. The content can be the same as the one submitted in the proposal form. Mention the details of the paper (title, author(s) and name of the journal/publication) used to migrate this project, at the end of the synopsis.

1 Introduction

Introduction of the research migration project. Give a brief description of the paper that was migrated to OpenFOAM in this project.

2 Governing Equations and Models

A brief review of the governing equations solved using OpenFOAM. Also, include any models (if applicable) used in the simulation. To explain various models, use excerpts from the OpenFOAM files being used and briefly explain the various parameters in them. Mention all the changes or assumptions used in this project in comparison to the study which has been migrated.

3 Simulation Procedure

3.1 Geometry and Mesh

A detailed discussion on creation of geometry and its meshing. The software used for creating the geometry and its mesh needs mentioning. Mention, if any, the number of blocks, refinement/grading in the mesh etc.

3.2 Initial and Boundary Conditions

Discuss the initial and boundary conditions used for solving the problem. Tables can also be used for this purpose.

3.3 Solver

Discuss the solver(s) used in the simulation.

4 Results and Discussions

A detailed description of the results from the simulation. Use contours and/or plots wherever necessary. Comparison of results obtained from OpenFOAM simulation(s) to the one from the paper used to migrate this project is mandatory. Inference(s) drawn from the results, which were not mentioned in the paper used to migrate this project, can also be mentioned.

References

List all the references used in creating this report. The reference to the paper that has been used to migrate to OpenFOAM in this project should be cited as the first source.

DISCLAIMER: This project reproduces the results from an existing work, which has been acknowledged in the report. Any query related to the original work should not be directed to the contributor of this project.