FOSSEE, IIT Bombay – Hackathon 2023 : OpenFOAM Hackathon

Project Report File

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Project Title: **91 - Validation of Laminar Pipe Flow (in OpenFOAM v10)**

Procedure:

1. Verified the input files, such as the Velocity and Pressure parameters, Transport and physical Properties, Geometry and Mesh along with the solver control files. Verified the files are compatible with the version in use.

2. Proceeded with the input commands in order:

   blockMesh
   checkMesh (to check the Mesh quality)
   simpleFoam (solver)
   paraFoam (or) **touch filename.foam** (to create the foam file for Post-Processing)

3. *Post-Processing Results:*

Attached the Final Velocity magnitude and Velocity Plot Graph.