

Lab 13

Time-dependent Navier-Stokes equations. deal.II step-35.

Advanced Topic in Scientific Computing - SISSA, UniTS, 2024-2025

Pasquale Claudio Africa

29 Nov 2024

Assignment

Read the documentation of `step-35` .

This program can be extended in the following directions:

1. Adaptive mesh refinement: Using adaptive mesh refinement can lead to increased accuracy while not significantly increasing the computational time.
2. Flow past a cylinder: Compare the results by changing the geometry, i.e. by using `GridGenerator::channel_with_cylinder` .
3. Extension to 3D.