



Module PMRF-ISSS103/II/2025

Computational Heat and Fluid Flow

Name of the PMRF student

Aritra Roy Choudhury

Required background of the students taught

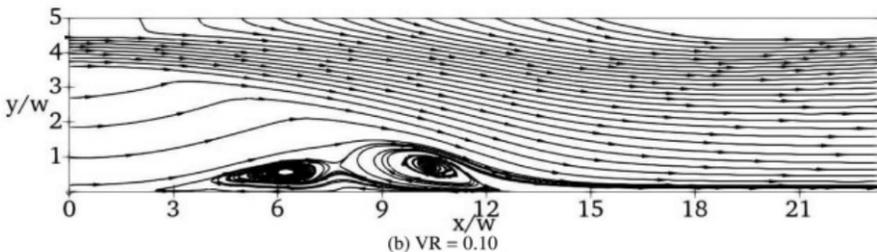
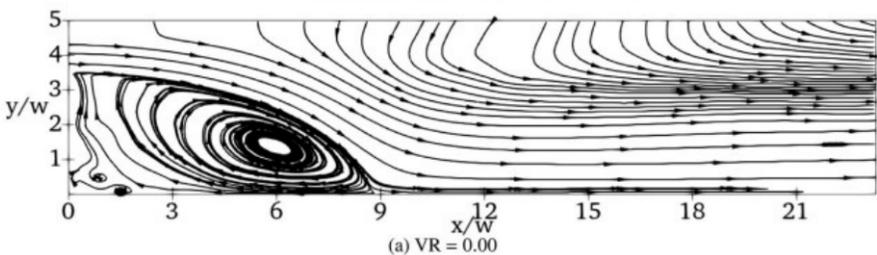
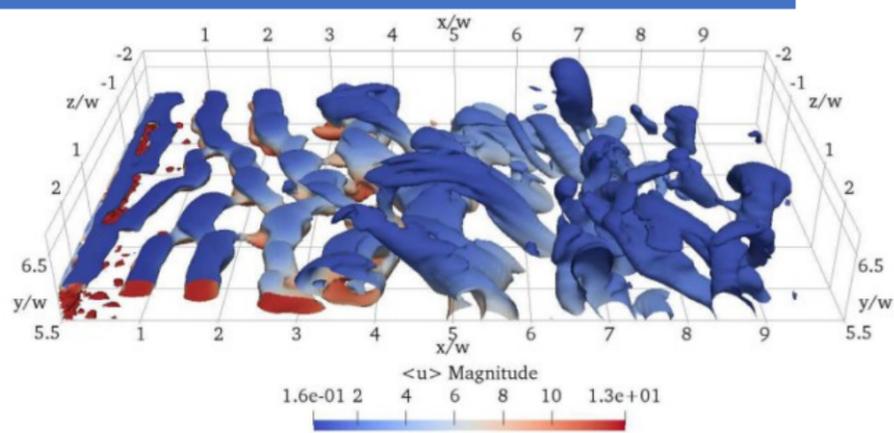
Undergraduate fluid dynamics, basic programming skills, undergraduate level mathematics

Details of the content of the module

This course aims to help students understand and solve problems related to the behaviour of partial differential equations. It introduces the finite volume method as a tool for solving these problems.

- 1) Governing equations
- 2) Steady diffusion problem
- 3) Steady convection diffusion problem
- 4) Unsteady problems
- 5) Stability, convergence and consistency
- 6) Demonstration using simple python code

Throughout the course, students will engage in hands-on coding activities and develop programming skills to implement the discussed methods.



Schedule of the module

Course duration: 13/10/25 to 31/10/25

Lecture: Monday/Friday: 07:00 PM to 09:30 PM

Tutorial/Discussion: (will be decided later)

Meeting link : Will be shared later

Link:

Contact email ID:

issf.forum@gmail.com

Registration link:

<https://forms.gle/DpUDN4EBdYMYFESh6>