



Module PMRF-ISSS021/2024

# Incompressible Fluid Flow

## Name of the PMRF student

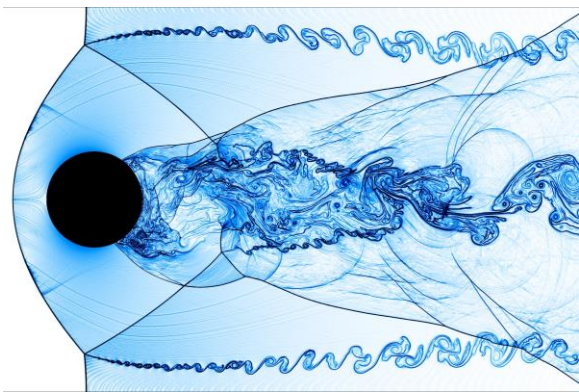
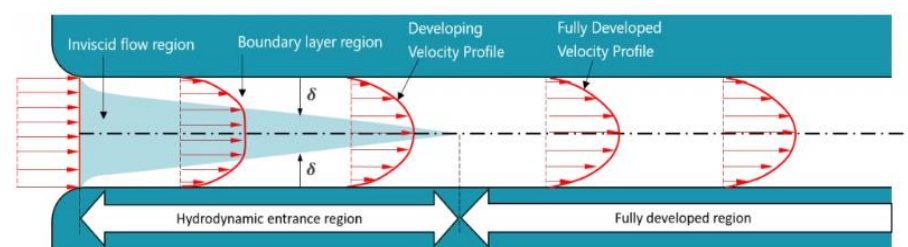
Azhar Gafoor CTP, IISc Bangalore

## Required background of the students taught

Mechanical Engineering,  
Aerospace Engineering,  
Civil Engineering

## Online session coordinator

Will be chosen from the list of registrants



## Details of the content of the module

The course aims to deliver basic as well as some advance concepts in fluid mechanics. Lectures will provide theoretical explanation and derivation of the topics:

1. Fluid properties and continuum concept.
2. Kinematics of fluid motion.
3. Eulerian and Lagrangian formulations.
4. Mass and momentum conservation.
5. Navier-Stokes equation and applicability to simple cases (Couette Flow; Poiseuille flow).
6. Stream function and velocity potential.
7. Introduction to boundary layer theory and turbulent flows.

## Schedule of the module

Course duration: 06/02/24 to 25/04/24 (tentative)

Lecture: Tuesday and Thursday. 7:00 PM to 8:30 PM

Tutorial/Discussion: 1 hour per week

(time - decided later)

Meeting link : Will be shared later

Contact email ID: [issf.forum@gmail.com](mailto:issf.forum@gmail.com)

Registration link:

<https://forms.gle/dvrk7BoB7yGwVN5FA>

