



Module PMRF-ISSS014

## Fluid Mechanics through pictures

### Name of the PMRF student

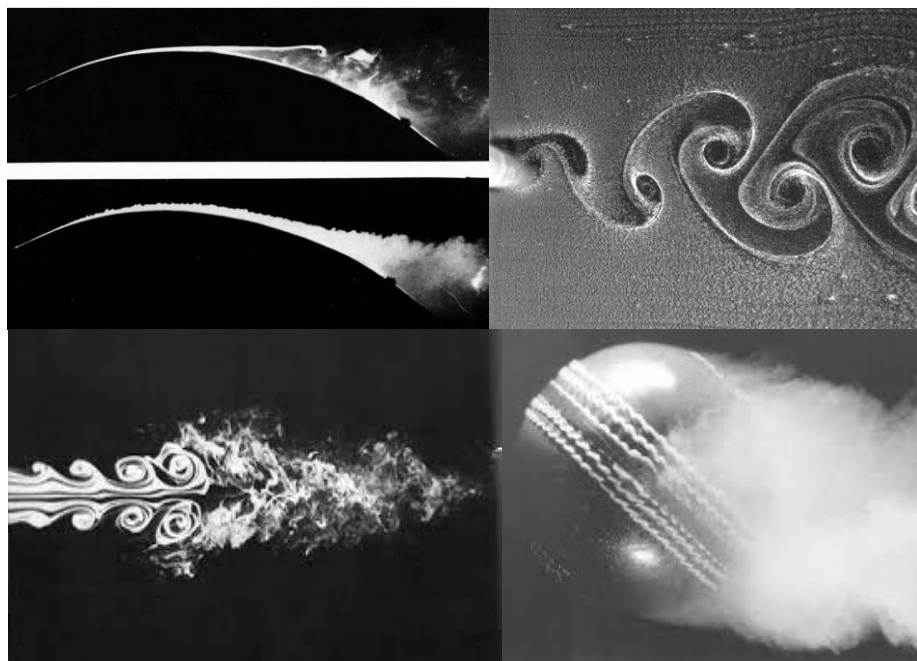
Siddhant Jain

### Pre-requisites and required background

Anyone interested in understanding beautiful and intriguing phenomena of fluid flow.

### Online session coordinator

Will be chosen from the list of registrants



### Details of the content of the module

The course intends to introduce the attendees to the beauty of Fluid Mechanics. The lectures would primarily include videos and images along with discussions. The following phenomena will be covered:

1. Basic concepts: Reynolds number, laminar and turbulent flows, Boundary layer
2. Flow over Flat Plate: Boundary layer visualization
3. Karman Vortex Street: Flow around streamlined and bluff bodies.
4. Sports Aerodynamics: Flow around golf ball, cricket ball, racing car, and cyclist.
5. Jets: Laminar and turbulent jets, Kelvin-Helmholtz instability, Rayleigh-Taylor instability
6. Vortex Rings
7. Convection: Rayleigh - Benard convection, convection currents in atmosphere and oceans.

### Schedule of the module

Days: Tuesday and Thursday

Timings: 6:30 – 7:30 PM

Course starts on: 30th August, 2022

Meeting link : Will be shared later

[Link](#)

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

Registration link:

<https://forms.gle/xrzL1hMUfPiZv3wL6>