



Module PMRF-ISSS045/II/2024 Gas Dynamics

Name of the PMRF student

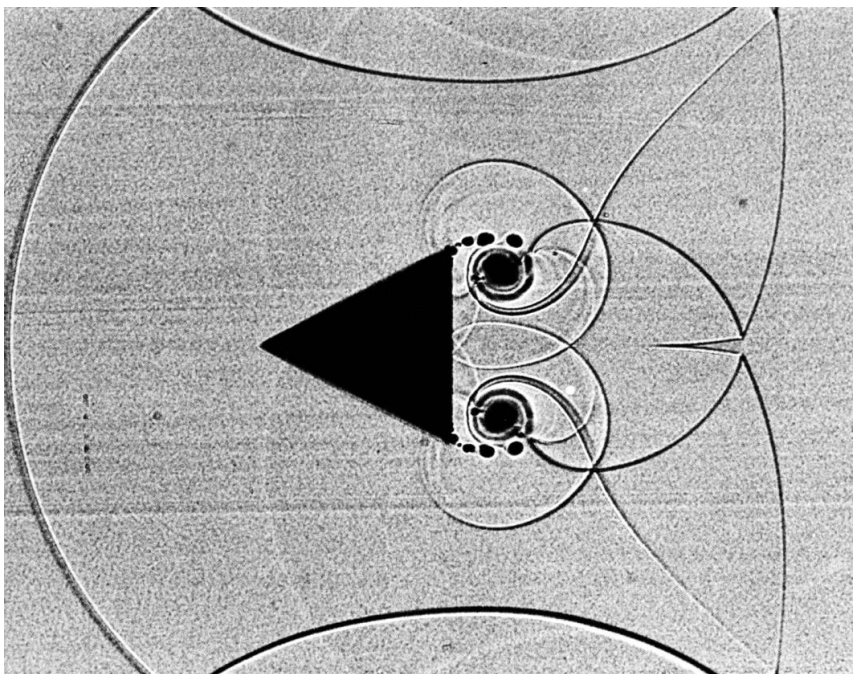
Saini Jatin Rao, IISc Bangalore

Required background of the students taught

Any learner with UG level background in Fluid Mechanics, Thermodynamics and Engineering Mathematics.

Online session coordinator

Will be chosen from the list of registrants



Details of the content of the module

This course is an introduction to the fluid mechanics of compressible flows. These effects are often observed in various scenarios such as music from a simple loudspeaker to the supersonic flight of an airplane.

The following key concepts will be covered:

- Revision of Basics
- Governing Equations of Compressible flow
- Nozzles and Diffusers
- Normal and Oblique Shock
- Shock Tubes
- Flow with friction and heat transfer - Rayleigh and Fanno Flows

There will be periodic review of essential concepts throughout the course.

Schedule of the module

Registration Deadline 15th March 2024

Course starts on 18th March 2024

Course ends on 31st July 2024 (tentative)

Lectures uploaded every Monday – 7:00PM

Learning efforts required: 2-3 hrs per week

Meeting link : Will be shared later

Contact email ID: issc.forum@gmail.com

Registration link:

<https://forms.gle/XLdCBsU3BzHofqC79>