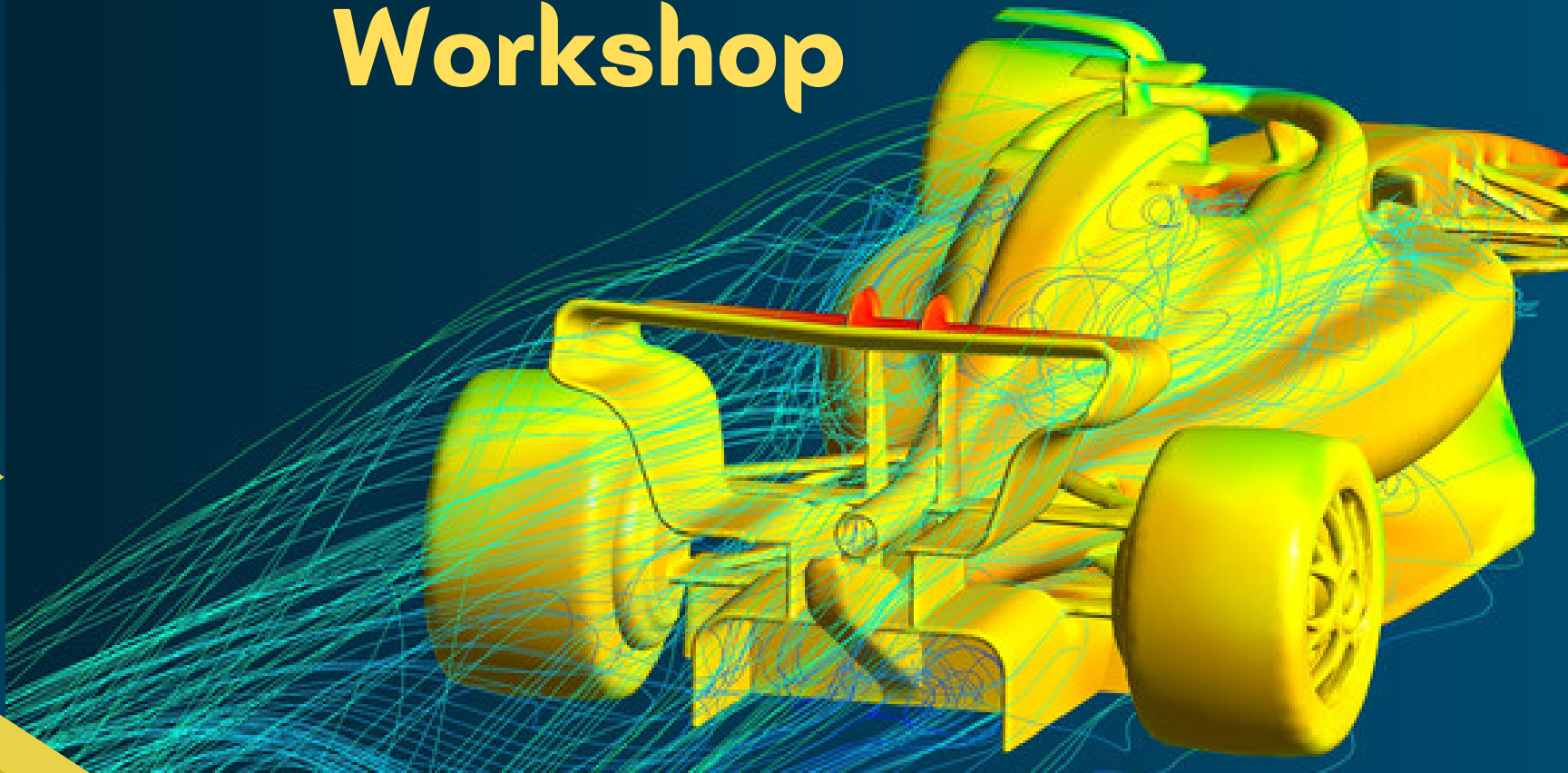




Indian Institute of
Space Science and Technology
Thiruvananthapuram-695547
Department of Space, Govt. of India

CONSCIENTIA 2K22

Introduction to Simulations in Engineering Workshop



Let's Dive into Simulations!

What is it?

Simulation is the process of using computer-based modeling of a system to understand its behavior and predict the effect of changes. Simulation represents a powerful method for analyzing, designing, and operating complex systems.

What you will Need ?

- A laptop/PC
- Minimum requirements - intel I3 processor or above, ryzen 3 or above, minimum 2GB graphic card, 8GB RAM
- Good Internet connection
- ANSYS student version installed on your device (preferably 2022 R2)
(Link for download given below)

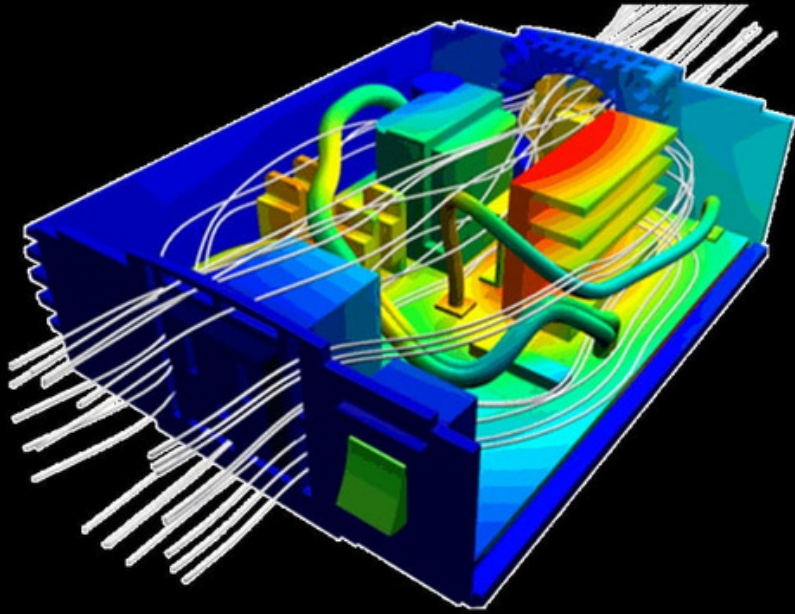
Pre-requisites:

- None
- Everything will be taught from scratch.

Link for download:

<https://www.ansys.com/en-in/academic/students/ansys-student>

What you'll learn



Webinar

- Introduction on simulation
- Why is it a must have technical skill
- How to begin your simulation journey
- Overview of a solved example in ANSYS.

Workshop

Day 1 (uncovering the black box)

- Understanding mathematical modelling.
- Numerical method-Finite Element Method(FEM)

Day 2 (solution using ANSYS)

- Solving a 1D heat conduction problem from pre-analysis to verification of the result.

**Estimated time for workshop -
3 Hrs.(1.5 each day)**

SOFTWARE USED : ANSYS

Why you should attend this workshop ?

- **No prior knowledge of simulations is assumed.**
- **Recommended for absolute beginners.**
- **It is a highly lucrative technical skill.**
- **Will give a kick start to your simulations journey.**
- **Junior years of UG is the most appropriate time to start learning such skill.**

Very beneficial for 1 st ,2nd and 3rd year UG students

REGISTRATION FEE

WEBINAR - Rs.50

WEBINAR+WORKSHOP - Rs.~~250~~ 200*

DATE

WEBINAR - 12 October, 6:00PM - 7:30 PM

WORKSHOP DAY 1 - 15 October, 6:00PM - 7:30 PM

WORKSHOP DAY 2 - 16 October, 6:00PM - 7:30 PM

NOTE: The webinar will provide only a brief overview of simulation but to get a proper hands-on experience and learning, it is recommended to attend the workshop as well.

***Early Bird offer valid till Oct 7**