



Module PMRF-ISSS044/2025

## Fundamentals of Micromagnetism with OOMMF

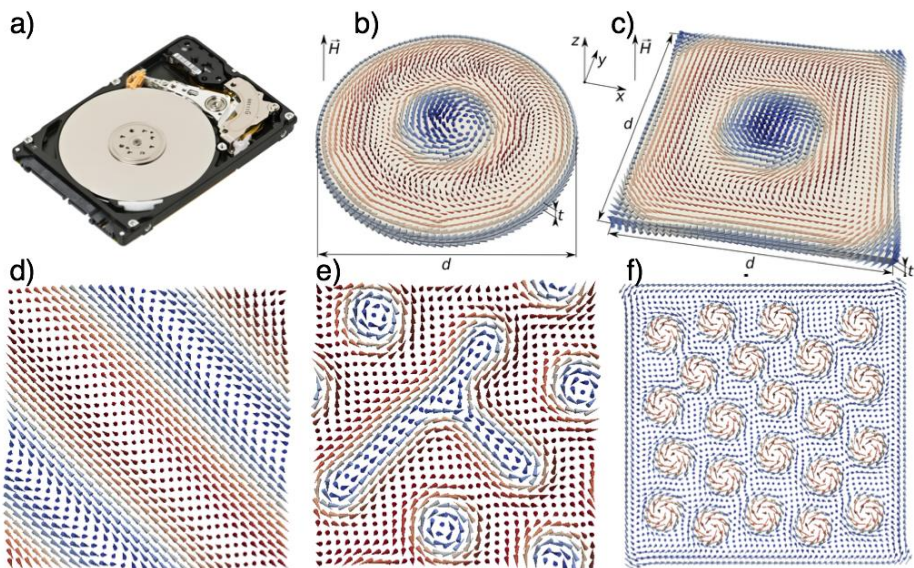
### Name of the PMRF student

Suprotim Saha

### Required background of the students taught

Basic 10+2 level knowledge of physics and magnetism in general

Course is designed for both UG and PG level Material Science, Electrical Engineering, and Physics students



### Details of the content of the module

#### ❖ Introduction to Micromagnetics

- Exchange Interaction
- Zeeman Interaction
- Anisotropy
- Magnetostatic Interaction
- Finite difference method to solve micromagnetic equation

#### ❖ Familiarizing with the OOMMF online module

- Writing the basic OOMMF code
- Running the code with simultaneous visualization
- Simulating a hysteresis loop
- Saving the data for post-processing

Course comprises of pre-recorded videos uploaded of the aforementioned modules

### Schedule of the module

**Date:** 20th - 29th April, 2025

**Schedule:** Recorded video lectures will be uploaded everyday

**Number of lectures:** 10

**Duration of lectures:** 2 hours each (Total ~ 20 hours)

Meeting link : Will be shared later

[Link](#)

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

Registration link:

[Link](#)