



Module PMRF-ISSS144/III/2024

Introduction to Nanoscale Heat Conduction

Name of the PMRF student

Nikhil Malviya

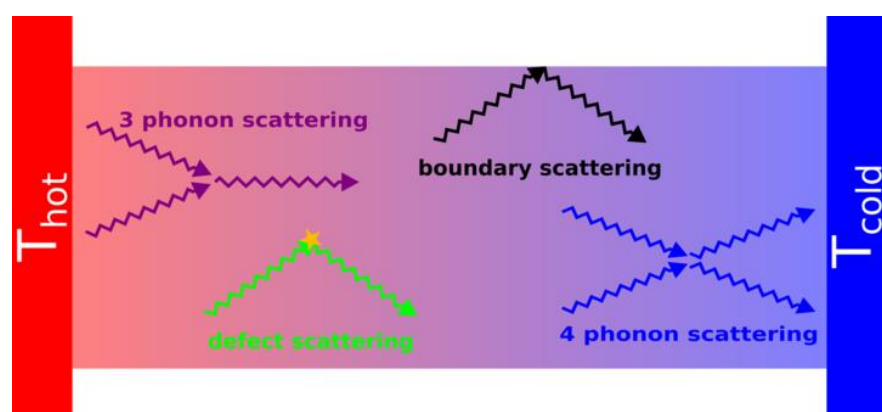
Details of the content of the module

Required background of the students taught

The course has no pre-requisite, all are welcome.

Online session coordinator

Will be chosen from the list of registrants



Generalized heat conduction equation, crystal structure: real and reciprocal lattice, harmonic and anharmonic crystal potential, 1D atomic chain and its extension in 2D and 3D, introduction to basic quantum mechanics, phonon dispersion and heat capacity of the crystal, anharmonic phonon-phonon interaction, Boltzmann transport equation for phonon transport, thermal conductivity

Schedule of the module

Start date: 8th September 2024 (8:30 am)

Total number of hours: 30 hours

Day and Time: Every Sunday, 8:30 am – 10:00 am

Mode of teaching: Live online classes

Meeting link: Will be shared later

Registration Link: (Valid till 7th September, 2024)

<https://forms.gle/St6XJVDxLJc9puBH9>

Contact email ID: iss.forum@gmail.com

