# Theoretical Sciences Unit Jawaharlal Nehru Center for Advanced Scientific Research Jakkur P.O Bangalore 560 064



# **SEMINAR NOTICE**

## Speaker:-Dr. Siddhartha Lal

Host:- **Prof. Vidhyadhiraja NS** JNCASR

Associate Professor, Department of Physical Sciences, IISER Kolkata

# <u>Title</u>Quantum Matter and the Age of Entanglement

#### Abstract:

There is great activity at present all over the world towards developing quantum technologies. But what is the basic physics that drives this activity? Why are we searching for novel quantum materials, and building noise-free quantum computers? Where does my research fit in with all of this? In presenting some answers, I will focus on how the concept of entanglement - a feature that is unique to the quantum world of an interacting many-particle quantum system holds the key to next-generation quantum technologies. I will also offer some insights on results we have obtained recently on the entanglement encoded within a few

different examples of strongly interacting quantum matter.

Date: 26<sup>th</sup>May 2023(Friday)

Time: 02:30 pm (Coffee/Tea @ 02:20pm)

## Venue: Kanada Auditorium

All are cordially invited.