



IIT PALAKKAD

# In-House Symposium

Department of Physics



The In-house symposium is an annual event organized by the Department of Physics at IIT Palakkad. During this exciting two-day event, members of the department come together to share their research advancements.

The program of the symposium entails talks by distinguished physicists, along with faculty and student presentations and posters.

## Colloquium Talks 2023



**Prof. Rupamanjari Ghosh**

Department of Physics  
Shiv Nadar University



**Prof. Sai Vinjanampathy**

Department of Physics  
IIT Bombay



Nila Campus  
April 21-22, 2023

Time	Speaker	Talk Title
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09:15 Commencement

09:30-10:30	Prof. Rupamanjari Ghosh Department of Physics, Shiv Nadar University	The Second Quantum Revolution
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10:30- 11:30 Break and Interaction with the colloquium speaker

**Session 1 : Chairperson - Chandrima B. Pushpan**

11:30-12:00	Jithin. G. Krishnan	Localizing entanglement in multiparty systems
12:00-12:30	Vishwas V.	Probing inherent length scales in sheared amorphous solids and equilibrium supercooled liquids

12:30-13:00 Poster Session

13:00-14:00 Lunch

**Session 2 : Chairperson - Harikrishnan K.J.**

14:00-14:15	Swathi T.S.	Excursions in SYK model
14:15-14:45	Ranjuna M. K.	High temperature anomalous Raman and photoluminescence response of molybdenum disulfide with sulfur vacancies
14:45-15:00	Asha Ann Abraham	Magnetic ground state of Mott Insulator $A_2LaRuO_6$ ( $A=Ca, Ba$ )

15:00-15:30 Break/Poster

**Session 3 : Chairperson - Sivadas P.**

15:30-15:45	Olivia Vincent	An active particle near a soft boundary
15:45-16:15	Debarati Chatterjee	Probing the Modulation in Facilitated Diffusion guided by DNA-Protein Interactions in Target Search Processes
16:15-16:30	Akshay Bhatnagar	Microswimmers in Turbulence

Time	Speaker	Talk Title
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09:15 Commencement

09:30-10:30	Prof. Sai Vinjanampathy Department of Physics, IIT Bombay	From Diagonalizing Matrices to Time Crystals
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10:30- 11:30 Break and Interaction with the colloquium speaker

**Session 1 : Chairperson - Olivia Vincent**

11:30-12:00	Jeena S.K.	Rapidly Rotating massive Pop III Stars: A solution for High Carbon Enrichment in the Early Galaxy
12:00-12:30	Revathy B.S.	Free evolution technique in quantum heat engines

12:30-13:00 Poster Presentation

13:00-14:00 Lunch

**Session 2 : Chairperson - Athul Krishna P.V.**

14:00-14:15	Shyam Sundar Pati	Artificially Engineered Metasurfaces for Satellite Communications, EMI Shielding and Concurrent Reduction of RCS and Mutual Coupling in MIMO antennas
14:15-14:30	Moumita Nandi	Magnetic and transport properties of Co intercalated TaS <sub>2</sub>
14:30-14:45	Mayarani M.	Colloidal self-assembly: harvesting nature for applicants

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**End of the Symposium**


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