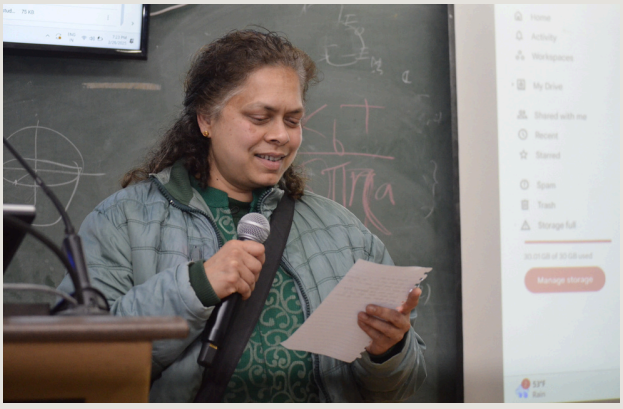
SPS NATIONAL SCIENCE DAY CELEBRATION

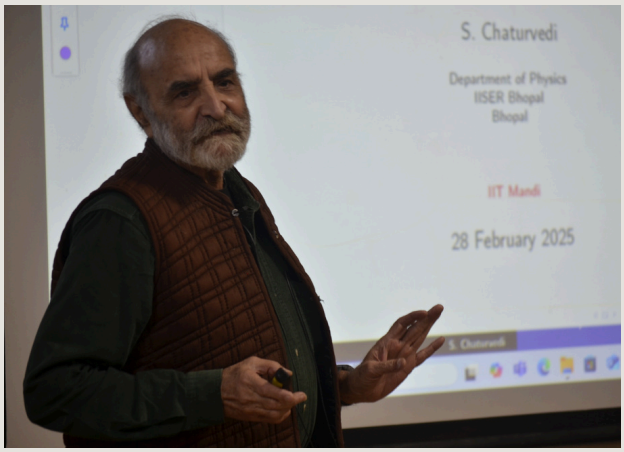
On the 28th of February the School of Physical Sciences IIT Mandi celebrated the National Science Day an occasion that had grown to be an annual occurrence for the school. The event was held in the A1-NKN South Campus in the attendance of both the SPS faculty and the students.

Prof. Subash Chaturvedi, a visiting professor of IISER Bhopal graced us with his presence as the Chief Guest and gave a talk on ***"Features of Quantum Mechanics that Underline Quantum Technologies"***. This was then followed by the competitions that included poster presentation, talks, science activities and more. The event not only highlighted the importance of scientific inquiry but also fostered a sense of community among participants, encouraging collaboration and creativity.

The event started with the lamp lighting and Sarasvati Vandana followed by a speech by the Chairperson of SPS, Prof. Bindu Radhamany, in which she highlighted the lives of CV Raman and Richard P Feynman. She then welcomed the Chief Guest with a traditional Himachali shawl and cap. Prof. Krishna M Parattu gave an overview of the work and life of the chief guest emphasizing the profound impact of his contributions to physics and education. Prof. S Chaturvedi gave a two hour discourse focusing on the features that are tied down to the formation of quantum mechanics. The interactive session proved to be a lively one with responses from both the faculty and students and concluded with a poem recitation from the speaker himself.



After a short tea break the talks began which consisted of three sessions chaired by the professors including lunch and science activities in between. The audience was excited and overjoyed by Pryanshu Basur's *Cosmic Conundrum* using the Universe Sandbox Simulation, which was the first of the two sessions of science activities. . In addition to improving the participants' comprehension of difficult scientific ideas, both sessions promoted animated debates that lasted far into the afternoon. The second exercise, which involved describing the physics underlying



each movie scene, was guided by Ridham Mahajan and Rajan Mishra and generated a lot of discussion and audience participation.

"*Finite temperature spin-dipole oscillations in coherently coupled condensates*" by Sunil Kumar, "*Phonons and quasi-particle excitations in a putative quantum spin liquid candidate*" by Vivek Kumar, "*Correlated emission lasing in a single quantum dot embedded inside a bimodal photonic crystal cavity*" by Lavakumar, and "*Coupling of magnetism and transport properties to the lattice degrees of freedom in* $NdBaCO_{2}O_{5+\delta}$ (δ=0.65)" by Himanshu Pant were all awarded for the best talks of the event. The winners of the best poster were P. Vivek on "*Quantum Walk Transportation in 2D and 3D Lattices*", Koushik Gayen on "*2D perovskite-based flexible memristors for neuromorphic applications*", Aravind V Raj on "*Transport Properties of GaV4Se8 Tetrahedral Cluster Compound*" and Prithwija Mandal on "*Investigation of Structural Phase Transition in α-In2Se3 using Raman Spectroscopy*". Last but not least, the Physics Club, in partnership with the SPS, held a side competition for the funniest meme for which Pryanshu Basur won first place, followed by Ridham Mahajan and Mahipal Kuamawat in third place. The students left with a greater appreciation for the innovative research being conducted and a desire to collaborate on future projects and research.