

Seminar

Harnessing Atoms and Photons for Precision Sensing

Subhadeep De

IUCAA, Pune

We are focused on precision measurements to explore the fundamental aspects of science using atoms and photons as the basis. For that, we are developing an ytterbium-ion based optical atomic clock using its highly forbidden electric octupole transition, which is chosen due to its high sensitivity to the possible variations of the fine-structure constant and also for the violations of the Lorentz symmetry. We also developed a novel mechanism for optical fiber based distributed sensing (DAS) of the ground vibrations, acoustic signals with unprecedented accuracy. I plan to describe these ongoing activities in my lecture.

Friday, Jun 12th 2026

16:00 Hrs (Tea / Coffee 15:45 Hrs)

Auditorium, TIFRH