

Students' Annual Seminar

Optical technique for investigation of Thin films and 2D atomic layers

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Development of non-invasive techniques is attracting huge research interest for investigation of thin films and lower dimensional materials. Spin Hall effect of light (SHEL) is one such method which is currently being explored for investigation of dielectric and magnetic properties of thin material films and 2D atomic layers. SHEL is an optical analogue of electronic spin hall effect in materials, and arises due to the interaction of spin and orbital angular momentum of light. It is observed in all basic optical process i.e., reflection, transmission of a polarised laser beam from an interface. In this talk, I will discuss about this technique, current challenges and the modification done by us for studying various effects in 2D-layers of Transition metal dichalcogenides, and other exotic materials.

Monday, Mar 13th 2023

08:30 AM (Tea / Coffee 8.15 AM)

CR-4, TIFR-H