

# **Students' Annual Seminar**

## **Non affine Parameter in real and force space for a polydisperse granular matter**

**Pappu Acharya**

Polydispersity plays an important role for local non affine parameter of a particular structure. More the polydispersity the peak height of histogram of local chi (LNAP) goes down when the tail goes far. In a recent paper, (Tong, Tan and Xu, Sci. Rep. 2015), the authors have shown that a polydisperse granular solid undergoes a well-defined ideal crystal to disordered crystal transition as polydispersity is increased. While there is no structural signature at this transition, coordination number shows differences in the two phases. We study the same system in both real and force space and found the LNAP and GNAP for a polydisperse granular matter.

***Monday, Apr 2<sup>nd</sup> 2018***

***03:00 PM (Tea/Coffee at 02:30 PM)***

***Seminar Hall, TIFR-H***