

Students' Annual Seminar

Vibrated Granular Matter-Trapping, Flocking and Crystallization

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Vibrated Granular Matter shows a whole lot of interesting collective behavior subjected to vibration, confinement and obstacles. In these systems energy is fed at each local constituent particle level via surface vibration and they use this energy to move, align and order themselves.

In this talk I will discuss about trapping non-trapping phase transition in polar active particle, in presence of V-shape obstacle and their dependence on shape, size and motility.

I will also talk about vibrated system of rods and beads. There we try to understand moving crystalline state of beads in presence of motile rods and how does one rod moving through crystalline bead medium deform it. Finally, I will speak about flocking Non-flocking transition in rod and bead system through competition between bead flow and particle polarity alignment.

Tuesday, Jun 6th 2017

4:00 PM (Tea/Coffee at 3:45 PM)

Seminar Hall, TCIS