



ICTS

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TATA INSTITUTE OF FUNDAMENTAL RESEARCH

ICTS Colloquium

Title : A geometrical description of granular physics

Speaker : Shankar Ghosh, Tata Institute of Fundamental Research, Mumbai

Date : Monday, March 27, 2017

Time : 3:00 pm

Venue : Emmy Noether Seminar Room, ICTS Campus, Bangalore

Abstract : I will highlight two aspects of granular systems: (i) A sand grain cannot penetrate the space occupied by another, this gives rise to unilateral constraints. Such constraints are inconvenient in the framework of conventional mechanics. I will instead present an alternative geometrical framework to deal with such situations and demonstrate its utility by using this framework to explain few experimental results. (ii) The attractive interactions which are ubiquitous in atomic systems are replaced by dissipative frictional interactions in the world of granular physics. I will also speak about our current understanding on friction induced organisation in granular systems.