

ICTS Seminar

- Title : Generic Local Properties of Spacetime
- Speaker : Maulik Parikh, Arizona State University, USA
- Date : Thursday, March 8, 2018
- Time : 2:00 PM
- Venue : Emmy Noether Seminar Room, ICTS Campus, Bangalore
- Abstract : Every spacetime is locally flat. We will use this to obtain two generic local properties of spacetime. First, we will show that in any spacetime (with or without a horizon) one can write down a local first law of thermodynamics for gravity which, like the first law for black holes, includes the Bekenstein-Hawking (or Wald) entropy. Second, for closed strings propagating on an arbitrary background, we will show that the Virasoro constraint on the worldsheet implies the validity of the null energy condition in spacetime.