

ICTS Statistical Physics Journal Club Seminar

- Title : A microscopic derivation of nonlinear fluctuating hydrodynamics
- Speaker : Abhishek Dhar (International Centre for Theoretical Sciences, Bangalore)
- Date : Thursday, 17 September 2020
- Time : 03:00 pm (IST)
- Abstract : Hydrodynamics considers a coarse-grained description of a system where one looks at the evolution of the conserved fields which evolve slowly in time. The conserved fields constitute a macrostate of the system. There are a large number of internal degrees of freedom corresponding to a given specification of the macrostate and these serve as heat reservoirs for the conserved fields. In effect, they lead to dissipation and fluctuation terms appearing in the equations of hydrodynamics, apart from the so-called Euler terms. The talk will outline the derivation of hydrodynamics starting from a microscopic Hamiltonian, in the context of anharmonic oscillator chains.
- Venue : Online Seminar (Join the Zoom Meeting)
<https://zoom.us/j/97031671468?pwd=bXc4cVF4SUdFTIRTVlJ1bDhzWE9yZz09>
Meeting ID: 970 3167 1468
Passcode: 861313