ICTS | INTERNATIONAL CENTRE for THEORETICAL SCIENCES

TATA INSTITUTE OF FUNDAMENTAL RESEARCH

ICTS Statistical Physics Journal Club Seminar

Title : Slow quench dynamics in classical systems

Speaker : Kavita Jain (Jawaharlal Nehru Centre For Advanced Scientific Research, Bengaluru)

Date : Thursday, 25th February 2021

Time : 03:30 pm (IST)

Abstract : The phase ordering dynamics of a system following an instantaneous quench have been well studied but such dynamics have been relatively less explored when the quench occurs at a finite rate. I will describe our analytical and numerical results on a kinetic Ising model and a zero range process when the system is annealed slowly to the critical point. Starting from the time-evolution equations, we derive the Kibble-Zurek scaling laws for the defect density at the critical point and elucidate the role of critical coarsening in the approach to the critical point.

Venue : Please click on the link to join the meeting

https://zoom.us/j/98710172400?pwd=OGQ5SXNnTHJKYzZHdGwzZldvL2JvZz09
Meeting ID: 987 1017 2400

Passcode: 584626