

Seminar Announcement

Speaker: Prabuddha Chakraborty

Affiliation: Indian Statistical Institute

Date: 18th August, 2017

Time: 2pm -- 3 pm

Venue: Indian Statistical Institute, 110 Nelson Manickam Road, Aminjikarai, Chennai.

Title: The interplay of quantum mechanics, randomness and microscopic interactions in low ($d=2$) spatial dimensions.

Abstract: The idea of quantum mechanical interference led, nearly sixty years ago, the physicist Philip W. Anderson to predict the phenomenon of localization of quantum mechanical particles in a random potential, (Nobel Prize in Physics, 1977) a phenomenon absent in the classical limit i.e., when one considers only particles moving in a "random" environment, and not the wave-particle duality that is a part of our microscopic world. But quantum particles interact with each other, and the theory of localization could not account for inter-particle interactions. In this talk, I will give an introduction to this open problem in quantum statistical mechanics, and show some results from our research.

Tea/Snacks will be served after the talk.

Please forward this notice to anyone who you think may be interested.

Regards,

Seminar Coordinator.