



ICTS Colloquium

Title : Translational symmetry broken Mott states of ultracold bosons

Speaker : Krishnendu Sengupta, Indian Association for the Cultivation of Science, Kolkata

Date : Monday, February 5, 2018

Time : 3:00 PM

Venue : Emmy Noether Seminar Room, ICTS Campus, Bangalore

Abstract : In this talk I am going to survey a class of translational symmetry broken Mott states which has been recently experimentally realized using ultracold bosonic atoms in optical lattices. After a pedagogical introduction to physics of such ultracold bosons, I shall summarize main theoretical aspects and experimental realizations of their symmetry broken states. This will be followed by a discussion of their out-of-equilibrium dynamics with emphasis on the possibility of realization of Kibble-Zurek mechanism using such systems.