ICTS M.Sc Project Seminar

Title : Long Time Solution to the Euler Equations of Generalized Hydrodynamics for Periodic Integrable System

Speaker : Atharv P Deokule, ICTS-TIFR, Bengaluru

Date : Thursday, February 24, 2022

Time : 03:30 pm (IST)

Abstract : Euler equations of generalized hydrodynamics describe the large-scale evolution of integrable systems which have the number of conserved fields scaling with system size. We show that these equations give rise to a new set of conserved fields that are different from the usual conserved quantities which constitute the generalized Gibbs ensemble. For periodic systems, using the new conserved charges, long time solutions are given upto translations. We numerically verify the solutions for the hard-rod fluid and the Toda fluid.

Venue : Zoom link:
https://icts-res-in.zoom.us/j/83223584633?pwd=TDZkMmt3N1RiVUNNd05ITGhQZmFGdz09