

Seminar

Institute for Plasma Research

Title : The Cosmic Fluid: Chiral Instability and all that

Speaker : Dr. Abhishek Atreya

Physical Research Laboratory, Ahmedabad

Date : 11th May 2017 (Thursday)

Time : 03.30 PM

Venue : Seminar Hall, IPR

Abstract :

The evolution of our Universe crucially depends on its matter content. In the standard model of cosmology the universe is assumed to be composed of an ideal multi-component fluid. At different stages of the evolution of the Universe different components of the cosmic fluid dominate and govern its dynamics. In this talk we will start with an introductory description of cosmic fluid and its role in the dynamics of the Universe. We then look at a plasma instability that can possibly be present in the very early stages of the universe, namely the Chiral plasma instability and discuss the possible cosmological implications. If time permits we will also touch upon some other interesting aspects of cosmic fluid like quark-gluon plasma, dark energy and dark matter.
