

Department of Theoretical Physics

Special Free Meson Seminar (Through Skype)

<i>Speaker</i>	:	P.S. Saumia (Institute of Physics, Bhubaneswar)
<i>Topic</i>	:	Flow anisotropies, CMBR anisotropies and their interconnections
<i>Day, Date & Time</i>	:	Monday, July 23, 2012 at 2:30 p.m.
<i>Place</i>	:	Theoretical Physics Seminar Room (A304)

Abstract

We will present the correspondences between the physics of Cosmic Microwave Background anisotropies and the flow anisotropies developed from initial state fluctuations in relativistic heavy ion collisions. We will argue that some of the interesting features present in the CMBR power spectrum may be present in the corresponding power spectrum in relativistic heavy ion collisions. We will also discuss how the techniques developed in CMBR data analysis could be used in analyzing flow anisotropies in heavy ion collisions. The effect of magnetic field on elliptic flow in non-central collisions will also be discussed. Finally, we will present a new technique to analyze the anisotropic expansion history in case of early universe as well as heavy ion collisions by analyzing the geometry of the fluctuations.

(Nilmani Mathur)