Area Seminar

Title	Bulk viscosity of strongly interacting matter
Date and Time	05/07/2013 16:00:00
Speaker	Guruprasad Kadam Senior Research Fellow PRL, Ahmedabad
Area	Theoretical Physics
Venue	Room No. 469

Abstract

Quantum ChromoDynamics (QCD) describes the strong interaction physics at a fundamental level. While the Lagrangian of QCD is scale invariant, quantum effects break this symmetry. This is called scale anomaly. The violation of scale invariance manifests itself in the bulk viscosity of the strongly interracting matter; so its study becomes an important as well as interesting aspect of QCD and its phases. Low temperature thermodynamics of QCD can be described by hadron resonance gas model (HRG),an effective model where the elementary degrees of freedom are hadrons. In this talk I will discuss the calculation of the bulk viscosity at finite temperature and density using Kubo's formula in the light of HRG.