



Contribution ID : 735

Type : **Oral presentation**

Inhomogeneous Phases in QCD

Saturday, 5 July 2014 17:00 (20)

An important part of the current research efforts in QCD is focused on finding the phases of nuclear matter that occur at finite densities and temperatures. While the zero density, finite temperature region can be addressed with the help of lattice QCD, and the zero temperature, very high-density region can be explored with weak-coupling QCD, for the strong-interaction region of intermediate densities and temperatures one can only rely on effective models and nonperturbative methods. In recent years, compiling arguments and several model calculations indicate that this region may be described by inhomogeneous phases, that is, phases where (some) spatial symmetries are broken. I will present an overview of the most recent results on the topic of inhomogeneous phases of QCD and will discuss their implications for the existence and location of the QCD critical point, the symmetries of the different phases, and the order of the transition lines separating them.

Summary

Primary author(s) : DE LA INCERA, Vivian (University of Texas at El Paso)

Presenter(s) : DE LA INCERA, Vivian (University of Texas at El Paso)

Session Classification : Heavy Ions

Track Classification : Heavy Ion Physics