EHQG /KMI joint seminar

Quark matter in neutron star



Speaker: Mark Alford (Washington University St Louis) Date: 2013/07/16 (Tue.) 17:00~ Place: ES034(Lecture Room 9)

In this talk I will describe the densest predicted state of matter---color-superconducting quark matter. A color superconductor is very different from an "ordinary" electrical superconductor. It occurs at ultra-high density and has a much richer phase structure because quarks come in many varieties. Quark matter may well exist in the core of neutron stars, and the search for signatures of its presence is currently proceeding. I will give an accessible review of the features of color-superconducting quark matter, and discuss some ideas for finding it in nature.