



Contribution ID: 142

Type: **Oral presentation**

Pasta in QMC

Friday 27 March 2015 09:30 (30 minutes)

In the present paper we employ the quark-meson coupling model (QMC) to investigate the onset of the pasta phase in nuclear matter under conditions such as those expected in neutron star crusts.

Pasta is obtained with fixed proton fractions and for beta equilibrated matter.

We probe our results into restrictions imposed on the the values of the density and pressure at the inner edge of the crust, recently achieved by observation, as well as comparing them to the pasta obtained from Walecka-type models.

Author: Prof. SANTOS, Alexandre (UFSC)

Co-authors: Prof. MENEZES, Debora (UFSC); Prof. PANDA, Prafulla Kumar (Department of Physics, Utkal University, Bhubaneswar 751004, India)

Presenter: Prof. SANTOS, Alexandre (UFSC)

Session Classification: Hadronic and quark matter - applications in astrophysics

Track Classification: Hadronic and quark matter - applications in astrophysics