Contribution ID: 20 Type: Poster

Effects of Hyperons on the Structure of Neutron Stars

Monday 19 March 2018 16:00 (1 hour)

In the present work we have obtained the equation of state and the population of baryons and leptons to the highly asymmetric dense stellar matter, with the purpose of studying the effects of hyperons on the structure of neutron stars. To this end, we adopted the Zimanyi-Moszkowski model in the mean field approximation. From the equation of state obtained with the model, we solve numerically the Tolman-Oppenheimer-Volkoff (TOV) equation to the internal structure of neutron stars.

Summary

Author: DE OLIVEIRA, José Carlos (Federal University of Roraima)

Co-authors: Prof. RODRIGUES, Hilário (Centro Federal de Educação Tecnológica Celso Suckow da Fonseca (CEFET-RJ)); Prof. B. DUARTE, Sérgio (Centro Brasileiro de Pesquisas Físicas (CBPF/RJ)); Prof. CHIAPPARINI,

Marcelo (Universidade do Estado do Rio de Janeiro - UERJ)

Presenter: DE OLIVEIRA, José Carlos (Federal University of Roraima)

Session Classification: Monday Posters