

The Modern Physics of Compact Stars and Relativistic Gravity

18-21 Sept. 2013, Yerevan, Armenia



Contribution ID: 11

Type: **not specified**

The CasA a Hybrid-Neutron star?

It is demonstrated that the highly accurate measured data for the temperature of the young neutron star in the supernova remnant Cassiopeia A over the past 10 years—as well as all other reliably known temperature data of neutron stars—could have their naturally explanation within the “nuclear medium cooling” scenario. The explanation is that the thermal conductivity, resulting from a suppression of both the electron and nucleon contributions to it by medium effects is substantially reduced. The successful description of the observed data is possible not only for the star models made of hadronic matter but also for the so called hybrid models, for which one assumes to have a deconfined state of quark matter in the core.

Primary author: Dr GRIGORIAN, Hovik (Yerevan State University)

Presenter: Dr GRIGORIAN, Hovik (Yerevan State University)