

Contribution ID : 11

## Influence of the pasta phase on neutrino opacities

Content :

We calculate the diffusion coefficients that are related to the neutrino opacities in dense matter considering the formation of nuclear pasta and homogeneous matter. Our results show that the mean free paths are significantly altered by the presence of nuclear pasta in stellar matter when compared with the results obtained with homogeneous matter only. These differences in neutrino opacities certainly influence the Kelvin-Helmholtz phase of protoneutron stars as well as supernova explosion simulations.

Primary authors : Prof. MENEZES, Debora (Universidade Federal de Santa Catarina - Brazil)

Co-authors : Mr. ALLOY, Marcelo (Universidade Federal da Fronteira Sul)

Presenter : Prof. MENEZES, Debora (Universidade Federal de Santa Catarina - Brazil)

Session classification : --not yet classified--

Track classification : --not yet classified--

Type : --not specified--