NEUTRINO2010, XXIV International Conference on Neutrino Physics and Astrophysics, Athens, GREECE

Contribution ID: **72** Type: **not specified**

Magnetic moment induced transition of neutrino between different mass states in matter

We consider the process of neutrino radiative transition between different mass states in medium. The neutrino wave functions, used in calculations of the process rate and power, are obtained within the method of exact solutions of the modified Dirac equation in medium. The contribution of magnetic moment induced transition is analyzed in details. It is shown how the background matter could influence the process substantially through the modification of initial and final neutrino states. We study the most important cases for the process total rate with different sets of parameters typical for astrophysical applications.

Author: LOKHOV, Alexey (MSU)

Presenter: LOKHOV, Alexey (MSU)