LNGS SEMINARS

Oleg Smirnov

JINR Dubna, Russia

—

Limits on neutrino magnetic moments

Abstract

Borexino collaboration reported a new upper limit on the effective neutrino magnetic moment of $\mu_\nu^{eff} < 2.8 \cdot 10^{-11}\ \mu_B$ at 90% C.L. obtained analyzing 1291.5 days exposure of the second phase of the experiment. Using the limit for the effective neutrino moment, new limits for the magnetic moments of the neutrino flavor states, and for the elements of the neutrino magnetic moments matrix for Dirac and Majorana neutrinos, could be derived. Detail of the analysis and comparison with theoretical expectations and other experiments will be presented.

November 17, 2017 - 11:30 am
LNGS - “B. Pontecorvo” room