

LNGS SEMINAR SERIES

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Study of the electron lifetime limit using Borexino data

Study of the electron stability is a way to check the electric charge conservation law. One of the hypothetical electron decay modes, $e^- \rightarrow \gamma \nu_e$, can be observed in liquid scintillator detectors by searching for the 256 keV photons appearing in this decay. Borexino detector is suitable for this study due to its large volume and low energy threshold. The result obtained is the best up to date. Details of the analysis will be presented.

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