

## Search for double beta decay with NEMO-3

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The NEMO-3 experiment located in the Modane Underground Laboratory (LSM) is searching for neutrinoless double beta decay. The experiment has been taking data since 2003 with seven isotopes. The main ones are 7 kg of  $^{100}\text{Mo}$  and 1 kg of  $^{82}\text{Se}$ . Data from the initial phase of the experiment show no evidence for neutrinoless double beta decay which permits setting a 90% CL lower limit on the half-life time for such a transition. From these results we can determine an upper limit on the effective Majorana neutrino mass. NEMO-3 also measures two-neutrino double beta decays for other isotopes and has reached the highest precision measurements to date. We will present the latest results for  $^{150}\text{Nd}$ ,  $^{130}\text{Te}$ ,  $^{48}\text{Ca}$  and  $^{96}\text{Zr}$ . Such measurements are important for reducing the uncertainties on calculations for nuclear matrix elements. NEMO-3 data can also be interpreted in terms of alternative transition models, such as weak right-handed currents or Majoron emission.

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