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## Search for neutrinoless double beta decay of 100Mo with the CUPID-Mo detector

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The CUPID-Mo experiment is a demonstrator for a next-generation CUPID experiment. The first results of the CUPID-Mo experiment to study neutrinoless double beta decay of 100Mo are presented. The measurements are carried out in the the Laboratoire Souterrain de Modane (France) at a depth of 4800 m w.e. using low-temperature scintillating bolometers based on Li2MoO4 crystals. The installation consists of 20 Li2MoO4 crystals with a total weight of 4,16 kg (100Mo weighs 2,26 kg). The energy resolution of the detectors is 7.7 keV (FWHM) at a double beta decay energy of 100Mo (3034 keV). Over 2.17 kg·yr of exposure, no events were recorded in the region of interest (ROI), which allowed us to establish the best world limit on neutrinoless double beta decay of 100Mo, T1/2 > 1.4x1024 yr (90% C.L.). This corresponds to the limit on the effective mass of the Majorana neutrino, mv < (0.31-0.54) eV.

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