



Contribution ID: 197

Type: **not specified**

## AMoRE Experiment

AMoRE searches for the signature of neutrinoless double beta decay from the  $^{100}\text{Mo}$  with an experiment on the scale of 100 kg of the isotope  $^{100}\text{Mo}$ .

We developed scintillating molybdate crystals to run at millikelvin temperatures coupled with a metallic magnetic calorimeter and a SQUID sensor.

To demonstrate the full-scale AMoRE, we ran pre-experiments at the Yangyang Underground Laboratory. The AMoRE-II experiment is under construction and will start data-taking at Yemilab in 2027. The first stage of the experiment with 90 lithium molybdate crystals will begin in 2025. The 5-year run of AMoRE-II has a sensitivity of  $4.5 \times 10^{26}$  years with an expected background rate of  $\sim 1 \times 10^{-4}$  counts/keV/kg/year.

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