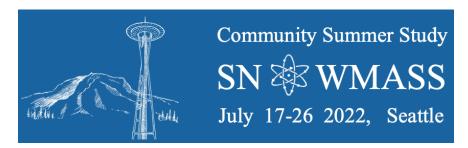
## **Seattle Snowmass Summer Meeting 2022**



Contribution ID: 39 Type: not specified

## CUPID: a next-generation neutrinoless double beta decay experiment.

Monday, 18 July 2022 20:40 (20 minutes)

The CUORE Upgrade with Particle Identification (CUPID) is a next-generation tonne scale neutrinoless double beta decay experiment that will be able to probe the inverted neutrino mass ordering region, test lepton number violation, and test the Majorana nature of neutrinos. CUPID's scientific program will be built upon the experience from previous experiments CUORE, CUPID-Mo, and CUPID-0, supported by the detailed background model studies from those experiments. CUPID will consist of 1500  $\rm Li_2MoO_4$  scintillating bolometric detector crystals amounting to a mass of 250 kg of  $^{100}\rm Mo$ , the isotope of interest. We will present the latest developments towards the construction of the experiment and the projected performance in terms of energy resolution and background rejection.

## **In-person or Virtual?**

In-person

**Primary author:** TORRES, Jorge (Yale University)

**Presenter:** TORRES, Jorge (Yale University) **Session Classification:** Poster Session