

CUPID-CJPL: a cryogenic bolometer testbed

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The search for the neutrinoless double beta decay has particular meanings for answering the essential question about Majorana property of neutrinos. CUPID collaboration chose the crystal of Lithium molybdate with enriched ^{100}Mo as the source and target to explore this important decay. The high Q value of ^{100}Mo and the scintillation property of this crystal enable CUPID to reach a superior low background level. The radioactivity of the crystals is crucial. We plan to build a cryogenic bolometer testbed in Jinping underground lab, to precisely measure the radioactivity from the crystals made by Shanghai Institute of Ceramics, Chinese Academy of Sciences (SICCAS). This testbed could also pave the road to explore new physics using cryogenic bolometer in Jinping underground lab.

Collaboration you are representing

CUPID

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