

Dark Matter search with CUORE-0 and CUORE

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CUORE will be a 1 ton experiment made of about 1000 TeO₂ bolometers, that will probe the neutrinoless Double Beta Decay of ¹³⁰Te. The excellent energy resolution and the low background of bolometric detectors will make CUORE sensitive to nuclear recoils, allowing to search for dark matter interactions. CUORE, thanks to its mass, could look for an annual modulation of the counting rate at low energies. We present the preliminary data obtained with CUORE-0 40 kg prototype, and the prospects for a dark matter search in CUORE-0 and CUORE.

Primary author: GORLA, Paolo (Gran Sasso)

Presenter: GORLA, Paolo (Gran Sasso)

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