

# Dark Matter search with CUORE-0 and CUORE

*Monday, 9 September 2013 17:00 (20 minutes)*

CUORE will be a 1 ton experiment made of about 1000 TeO<sub>2</sub> bolometers, that will probe the neutrinoless Double Beta Decay of <sup>130</sup>Te. 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.

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**Session Classification:** Dark Matter II

**Track Classification:** Dark Matter