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The CUORE and CUORE-0 experiments at LNGS

Friday 7 July 2017 15:45 (15 minutes)

The Cryogenic Underground Observatory for Rare Events (CUORE) is the first bolometric experiment searching for neutrinoless double beta decay that has been able to reach the 1-ton scale. The detector consists of an array of 988 TeO2 crystals arranged in a cylindrical compact structure of 19 towers. The construction of the experiment and, in particular, the installation of all towers in the cryostat was completed in August 2016 and commissioning started in fall 2016. The experiment has just completed the pre-operation phase and data taking is commencing. In this talk we will present the achievements of the CUORE construction phase and the performance of the detector during pre-operation. Physics results from CUORE-0, the first CUORE-style tower operated in 2013-2015, will also be updated.

Experimental Collaboration

CUORE Collaboration

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