

ID de Contribution: 117 Type: Ordinary

Neutrinoless double beta decay results from CUORE-0 and status of the CUORE experiment

mardi 15 mars 2016 09:15 (15 minutes)

The Cryogenic Underground Observatory for Rare Events (CUORE) is a 1-ton scale bolometric experiment whose detector consists of an array of 988 TeO2 crystals arranged in a cylindrical compact structure of 19 towers. CUORE-0 is the CUORE demonstrator: it has been built to test the performance of the upcoming CUORE experiment and represents the largest 130Te bolometric setup ever operated. CUORE-0 has been running in the Gran Sasso National Laboratory (Italy) from March 2013 to July 2015 and CUORE is now in its final construction and commissioning phase. In this talk we will present the final CUORE-0 analysis on neutrinoless double beta decay and the corresponding detector performance. We will also discuss the status of the CUORE experiment: the final results from the commissioning of the cryostat, the installation of the towers and the early commissioning of the experiment.

Auteur: Dr GORLA, Paolo (Laboratori Nazionali del Gran Sasso - INFN)

Orateur: Dr GORLA, Paolo (Laboratori Nazionali del Gran Sasso - INFN)

Classification de Session: Neutrinos

Classification de thématique: Experiment