Contribution ID: **137** Type: **Poster 0vbb**

Optimization of the CUORE bolometers response

The CUORE Experiment is a ton scale bolometer detector located at the Gran Sasso National Laboratories in Italy. The goal of the experiment is to investigate the 0nuBB decay of 130Te. CUORE started pre-operation runs in early 2017 for detectors optimization, which were followed by the first physics runs from Spring 2017 to Fall 2017. Afterwards a second optimization campaign was performed in late 2017. The optimization campaigns were performed in order to set the best operating conditions for the experiment for the 0nuBB search, in order to reach the sensitivity goal on the 130Te 0nuBB half-life, S0nu > 9 x 10^25 yr (at 90% C.L.) with 5 years of exposure. In this poster I will show the results of the optimization campaigns regarding the characterization of the CUORE detectors in terms of study of the bolometers performances with temperature and setting the detectors working conditions, in order to reach the 5 keV CUORE resolution goal for the 0nuBB search.

Authorship annotation

on behalf of the CUORE collaboration

Session and Location

Monday Session, Poster Wall #36 (Auditorium Gallery Right)

Poster included in proceedings:

yes

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Track Classification: Poster (participating in poster prize competition)