



Contribution ID: 42

Type: **Poster contribution**

## **CUPID-0: a cryogenic calorimeter with particle identification for double beta decay search.**

*Friday, April 21, 2017 5:00 PM (1 hour)*

With their excellent energy resolution, efficiency, and intrinsic radio-purity, cryogenic calorimeters are primed for the search of neutrino-less double beta decay (0nDBD). The sensitivity of these devices could be further increased by discriminating the dominant alpha background from the expected beta like signal. The CUPID-0 collaboration aims at demonstrating that the measurement of the scintillation light produced by the absorber crystals allows for particle identification and, thus, for a complete rejection of the alpha background. The CUPID-0 detector, assembled in 2016 and now in commissioning, consists of 26 ZnSe scintillating calorimeters for about  $2 \times 10^{25}$  0nDBD emitters. In this contribution we present the preliminary results obtained with the detector and the perspectives for a next generation project.

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**Session Classification:** Archivio Poster

**Track Classification:** Sessione Nuove Tecnologie