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# CUPID-0: a double-readout cryogenic detector for DBD

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A convincing observation of neutrino-less double beta decay (0DBD) relies on the possibility of operating high-energy resolution detectors in background-free conditions.
Scintillating cryogenic calorimeters are one of the most promising tools to fulfill the requirements for a next-generation experiment. Several steps have been taken to demonstrate the maturity of this technique, starting form the successful experience of CUPID-0.
The CUPID-0 experiment demonstrated the complete rejection of the dominant alpha background measuring the lowest counting rate in the region of interest for this technique. Furthermore, the most stringent limit on the Se-82 0DBD was established running 26 ZnSe crystals during two years of continuous detector operation.
In this contribution we present the final results of CUPID-0 Phase I including a detailed model of the background, the measurement of the 2DBD half-life and the evidence that this nuclear transition is single state dominated. The first results obtained after the upgrade of the detector in 2019 are presented as well.

**Primary authors:** CUPID-0 COLLABORATION; PAGNANINI, Lorenzo

**Presenter:** PAGNANINI, Lorenzo

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