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Results from CUORE-0, status of CUORE and summary of R&D with bolometers for neutrino physics RAUL HENNINGS-YEOMANS, University of California Berkeley, CUORE COLLABORATION — Searching for neutrinoless double beta decay ($0\nu\beta\beta$) may allow us to understand the Dirac or Majorana nature of the neutrino, constrain its mass and provide insight into the origin of the matter-antimatter asymmetry in the Universe, a long standing mystery at the heart of particle physics today. CUORE-0 is a 52 bolometer array searching for $0\nu\beta\beta$ decay from ^{130}Te currently taking data deep underground at the Laboratori Nazionali del Gran Sasso (LNGS). We will present the latest results from CUORE-0 as well as the current status of CUORE, a new 19 times larger bolometer array that plans to begin taking data by end of this year. In addition, we will summarize R&D with bolometers for future generation double-beta decay experiments.

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