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CUORE-0 Measurement of $2\nu\beta\beta$ decay CHRISTOPHER DAVIS, Yale Univ, CUORE COLLABORATION — The Cryogenic Underground Observatory for Rare Events (CUORE) is a neutrinoless double-beta ($0\nu\beta\beta$) decay experiment currently under construction at the Laboratori Nazionali del Gran Sasso (LNGS). CUORE will perform this search in ^{130}Te by using 988 TeO_2 bolometric crystals arranged in 19 towers inside of a cryostat operating at 10 mK. The first phase of CUORE, CUORE-0, took data at LNGS (Laboratori Nazionali del Gran Sasso) during the period from March 2013 to March 2015 using a single CUORE-like tower. In this talk, I will present the results from the CUORE-0 experiment for the two-neutrino double-beta ($2\nu\beta\beta$) decay measurement of ^{130}Te as well as the background model used to determine this result.

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