

Abstract Submitted  
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**Search for Neutrinoless Double Beta Decay with CUORE** VIVEK SINGH<sup>1</sup>, YURY KOLOMENSKY, Univ of California - Berkeley, CUORE COLLABORATION TEAM — The Cryogenic Underground Observatory for Rare Events (CUORE) is an experiment to search for neutrinoless double beta decay ( $0\nu\beta\beta$ ) in  $^{130}\text{Te}$  and other rare processes. Observation of  $0\nu\beta\beta$  would establish violation of the lepton number, indicate that neutrinos are Majorana particles, and would provide information about the absolute neutrino mass scale. CUORE, a bolometric detector composed of 988  $\text{TeO}_2$  crystals, with the total mass of about 750 kg of natural Tellurium, will start data taking this year in Gran Sasso National Laboratories (LNGS) in Italy. We will discuss the status of the CUORE experiment, and present the most recent results from CUORE-0, a single-tower array of 52 crystals, operated at LNGS between 2013-2015.

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