

Abstract Submitted
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EXO-200 Status DEREK MACKAY, Stanford University, EXO COLLABORATION — EXO-200 (Enriched Xenon Observatory-200 kg) is an underground double-beta decay experiment that uses 200 kg of Xenon isotopically enriched to 80% in Xenon-136. The Xenon is contained in an ultra-low background TPC where there is simultaneous collection of scintillation light (using Large Area Avalanche Photodiodes (LAAPD's)) and ionization charge in order to significantly enhance the energy resolution. EXO-200 should measure the, as yet unobserved, two neutrino double-beta decay mode as well as achieve competitive sensitivity for the neutrinoless double-beta decay mode of Xenon-136. EXO-200 was moved from Stanford University in August of 2007 and is currently under a 2000 meter water-equivalent overburden at the WIPP site in New Mexico.

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