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Neutrinoless double beta decay with EXO-200

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EXO-200 is one of the most sensitive searches for neutrinoless double beta decay in the world. The experiment uses 175 kg of enriched liquid xenon in an ultralow background time projection chamber installed at the Waste Isolation Pilot Plant, a salt mine with a 1600 m water equivalent overburden. This detector has demonstrated excellent energy resolution and background rejection capabilities. Using the first two years of data, EXO-200 has set a limit of 1.1x10^25 yr at 90% C.L. on the neutrinoless double beta decay half-life of Xe-136.

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