

## Recent results from EXO-200

*Tuesday, 10 September 2013 16:20 (20 minutes)*

EXO-200 is low-background liquid Xe time-projection chamber built to detect double-beta decay of  $^{136}\text{Xe}$ . Located underground at the WIPP site outside Carlsbad, NM, the detector has been running with Xe enriched to 80% since May 2011. In that time, the EXO collaboration has reported both the first observation of the 2-neutrino double-beta decay mode, a conventional second-order weak process, as well as a stringent limit on the hypothetical lepton number violating zero-neutrino mode. The collaboration has more recently improved the precision of the 2-neutrino mode decay rate to 3%, making it the most precisely-measured 2-neutrino decay to date, and continues to search for the zero-neutrino mode.

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