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Status of the EXO-200 experiment

A 200-kg low-background liquid Xe double beta decay detector (EXO-200) has been installed underground at the WIPP facility outside Carlsbad, NM. In addition to serving as a prototype for research and development toward a ton-scale experiment, EXO-200 is expected to provide the first measurement of the two-neutrino decay mode of 136Xe, as well as place competitive limits on the possible neutrinoless mode. All system components outside the time-projection chamber (TPC) itself were tested in a cryogenic commissioning run last fall. The TPC was installed earlier this year, and detector electronics are now undergoing initial testing. This summer will see the liquid Xe TPC fill, final electronics commissioning, and detector calibration. An instrumentation run with natural Xe is planned before data-taking with enriched Xe.

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