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Neutrinoless double beta decay search with EXO: EXO-200 results and status of nEXO

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EXO-200 is a liquid xenon experiment whose primary goal is to search for the neutrinoless double-beta decay of Xe-136. Such a process would violate the lepton number conservation and provide an insight into nature and absolute mass scale of neutrinos. EXO-200 has finished data taking in December 2018, accumulating more than 200 kg*yr of Xe-136 exposure. The EXO-200 data will remain to be useful for testing new approaches to analysis, such as deep learning, and for additional searches for new physics. In parallel, an effort to develop a next generation experiment, nEXO, has begun. This talk presents the latest EXO-200 results and describes goals and status of nEXO.

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