

Abstract Submitted
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First Results from KamLAND-Zen 800 CHRISTOPHER GRANT,
Boston University, KAMLAND-ZEN COLLABORATION — KamLAND-Zen is
searching for the neutrinoless double beta decay of ^{136}Xe with a 1-kiloton liquid
scintillator detector. The experiment was one of the first to reach a half-life sensi-
tivity of 10^{26} years, which was obtained by instrumenting roughly 380 kg of enriched
Xe in a small balloon. Since then, a new balloon was constructed in order to increase
the amount of enriched Xe and further improve the half-life sensitivity. This major
detector upgrade finished just last year, and in January of 2019, KamLAND-Zen
began taking data with nearly a ton (~ 750 kg) of enriched ^{136}Xe . New results from
the 750 kg data will be presented, along with an outline of future upgrades leading
to KamLAND2-Zen.

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