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Recent Results From KamLAND-Zen

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The KamLAND-Zen experiment is a new application of the KamLAND detector running in parallel with the ongoing antineutrino program at KamLAND. The experiment searches for neutrinoless double beta decay of ^{136}Xe using a target of Xe-loaded liquid scintillator placed at the center of the KamLAND detector. KamLAND-Zen recently completed its first phase of running, corresponding to the largest exposure of $^{136}Xe to date: 89.5 kg - yr. Based on the first-phase data set the collaboration obtains a lower limit for the neutrinoless double-beta decay half-life of ^{136}Xe :T_{1/2}{0\nu} > 1.9 \times 10^{25} yr at 90 Following a brief overview of neutrinoless double beta decay experiments I will discuss the KamLAND-Zen detector, the results of the first phase data set and their implications for the neutrinoless double-beta decay detection claim in ^{76}Ge reported by a part of the Heidelberg - Moscow collaboration.

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Classification de Session: Neutrinos

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