

Status of the GERDA double beta decay experiment

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The GERDA experiment [1] located in the Gran Sasso Underground Laboratory of INFN is using enriched Ge-semiconductor detectors directly within a LAr cryostat for the investigation of the double beta decay of ^{76}Ge . The experiment has a two phase approach. Phase I is using the detectors of the former Heidelberg-Moscow and IGEX experiments while Phase II will use in addition BEGe detectors optimized for pulse shape analysis. The design and performance during data taking of the experiment will be presented. The status of the preparation for Phase II will be outlined. First results of the data taking of GERDA will be given among them the identification of background components and a new half -life measurement of the 2 neutrino double beta decay of Ge-76 [2].

[1] GERDA-collaboration: K.-H. Ackermann et al., arXiv:1212.4067;

[2] GERDA-collaboration: M. Agostini et al., arXiv:1212.3210.