

Results of the GERDA Phase II experiment

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The only known practical way to probe the Majorana nature of neutrinos experimentally is via the discovery of the neutrinoless double beta decay. During the last years the GERDA (GERmanium Detector Array) experiment at the Laboratori Nazionali del Gran Sasso of INFN, Italy, remains one of the leaders in this field. In GERDA the Ge detectors, enriched in ^{76}Ge , are directly immersed in liquid argon which works as a cooling medium and as an active shield against external radioactivity. Data taking in Phase II started in December 2015. GERDA has achieved the background of 10^{-3} counts/(keV kg yr) and for the first time surpassed the sensitivity of 10^{26} yr.

At the end of 2019 the Phase II design exposure of 100 kg yr was reached and data taking was stopped. The final analysis of full GERDA Phase II data set is being performed.

At the Conference the final results of the GERDA Phase II experiment are going to be presented.

Secondary track (number)

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