Final result of the GERDA search for Ovββ decay of ^{76}Ge

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Abstract. The GERDA experiment, located in the underground Laboratori Nazionali del Gran Sasso, aims for the discovery of neutrinoless double-beta (Ovββ) decay in ^{76}Ge. It uses up to 44 kg of HPGe detectors enriched in the isotope ^{76}Ge, which are deployed into ultra-pure cryogenic liquid argon. The combination of powerful background suppression techniques (readout of the liquid argon scintillation light, pulse shape discrimination) together with an excellent energy resolution has permitted GERDA to be the first background-free Ovββ experiment. Moreover in the past years it reported the highest sensitivity on the half-life of Ovββ decay and the lowest background index in the region of interest. At the end of last year GERDA completed its data taking collecting an exposure of more than 100 kg*yr. In the talk the final result of the GERDA search for Ovββ decay of ^{76}Ge will be presented.

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