



Contribution ID : 272

Type : **Oral talk**

Commissioning of LEGEND-200 experiment

Friday, 2 December 2022 11:30 (15)

The LEGEND experiment is designed to search for neutrinoless double beta decay of Ge-76. Its first stage, LEGEND-200, is located at the Laboratori Nazionali del Gran Sasso (LNGS, Italy). About 200 kg of germanium detectors isotopically enriched in Ge-76 are going to be immersed in liquid argon (LAr) cryostat together with the LAr instrumentation system. The LEGEND-200 goal is to improve the background by a few times compared with the predecessors and reach the double-beta sensitivity of 10^{27} years. The commissioning of the experiment is ongoing. In May 2022 main elements of the installation were assembled and about 60 kg of germanium detectors were immersed in a cryostat in order to debug all experimental systems. At the time of the conference, an almost full-scale launch of the experiment should be completed using all available detectors (~100 detectors with total mass ~ 140 kg of enriched germanium). The aim of the talk is to present the actual status of LEGEND-200 mainly focus on the commissioning details.

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Session Classification : Neutrino Physics

Track Classification : Neutrino physics