

Status of CJPL and CDEX

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Abstract

China JinPing underground Laboratory (CJPL), with the world's deepest rock overburden, has come into its second year in operation [1, 2, 3]. In the past 2011, CJPL had experienced a large renovation project, which mainly focused on a ventilation system to improve the air condition against diesel exhaust et al..

China Dark matter EXperiment (CDEX) collaboration [4], founded in 2009, has started its first phase of direct search of dark matter, named CDEX-1. CDEX-1 is using two HPGe detectors with the mass order of 1kg. Both detectors are housed in rigorous shielding systems. Meanwhile, background of CJPL is also being measured, including cosmic rays gammas thermal and fast neutrons etc..

Another important progress of CDEX is the setting up of the first low background facility, which can help to select low background materials for the extreme experiment of rare counting rate.

On the other hand, the second phase of CDEX-10 is proceeding. We have finished the engineering design and is running prototype test. Monte Carlo Simulation is ongoing as well.

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