Contribution ID: 27 Type: not specified

Status of the COSINE-100 experiment

Thursday 18 May 2017 17:30 (20 minutes)

Presently a number of experiments are operating to search for the WIMP, a dark matter candidate. Among these experiments, DAMA/LIBRA claims to observe an annually modulated WIMP signal, while other experiments, using different technologies and target materials, exclude the DAMA/LIBRA signal region in the parameter space. The COSINE experiment aims at exploring these contradicting results by using NaI(Tl), the same target material as DAMA/LIBRA. The first phase detector with 106 kg of NaI(Tl), COSINE-100, was installed at the Yangyang underground laboratory in Korea. It consists of several shield structures, including a liquid scintillator veto system. The experiment has started physics data taking in late September 2016 and has been operating stably since then. The details and the current status of the COSINE-100 experiment will be presented.

Primary author: KIM, Kyungwon (Institute for Basic Science (CUP))

Presenter: KIM, Kyungwon (Institute for Basic Science (CUP))

Session Classification: Session 14