



Contribution ID: 171

Type: **Poster**

Status of SBL Experiment

SBL is a Short-BaseLine reactor neutrino experiment for searching sterile neutrinos, which will be performed using research reactor HANARO in Daejeon, Korea. HANARO has 30MW thermal power and detector will be placed at the distance of about 6m away from reactor. Currently prototype detector which has 50L of Gd-loaded LS as target is constructed and tested in several places with different overburden to understand background caused by cosmic muon and neutron. We compare background data from prototype detector and monte carlo simulation, and we make an effort to reduce background for main detector.

Primary author: Mr KIM, Jinyu (IBS, Sejong University)

Co-authors: Mr KIM, Baro (Chonnam National University); Dr JEON, Eun-ju (Institute for Basic Science); Dr SUN, Gwang-Min (Korea Atomic Energy Research Institute); Prof. KIM, Hongjoo (Kyungpook National University); Dr PARK, Hyangkyu (Institute for Basic Science); Mr YEO, Insung (Chonnam National University); Dr LEE, Jaison (Institute for Basic Science); Dr LEE, Jeong-yeon (Institute for Basic Science); Mr LEE, Jooyoung (Kyungpook National University); Dr PARK, Kang-soon (Institute for Basic Science); Dr MA, Kyungju (Sejong University); Prof. JOO, Kyungkwang (Chonnam National University); Prof. KIM, Siyeon (Chung-Ang University); Ms SONG, Sookhyung (Department of Physics, Chonnam National University, Korea); Ms SO, Sun-heang (Chonnam National University); Prof. KIM, Yeongduk (Institute for Basic Science, Sejong University); Mr KO, Youngju (Chung-Ang University)

Presenter: Mr KIM, Jinyu (IBS, Sejong University)

Track Classification: Short Baseline Oscillations / Sterile Neutrinos / Non-standard Oscillations