LSCNews



Laboratorio Subterráneo Canfranc

Newsletter 3/4 – Year 2024

Alfa "sneaks into" the LSC

Acquisition of water tank



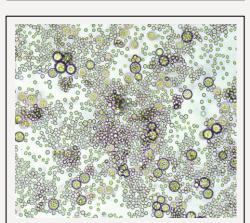


Alfa, the nuclear safety and radiological protection magazine of the Nuclear Safety Council (CSN), dedicates an article and its cover to the LSC, staying true to its spirit of promoting knowledge in science and technology in an accessible language and straightforward manner.

The LSC has acquired a tank with a capacity of 40 tons of water, intended for veto in large-scale physics experiments.



For the next two years, this water tank is located at CERN (Geneva, Switzerland) as part of the WCTE experiment, a project to test multiPMTs performance for Hyper-Kamiokande.



After 6 months at the LSC, the first biology experiment on the "Multicellular structure formation in response to low level background radiation" with Sphaeroforma arctica, a single-celled organism related to animals, has been completed. The goal is to study the origin of multicellularity from unicellular organisms.

Other relevant LSC Publications:

Neutrino halo profiles: HR-DEMNUni simulation analysis

Beatriz Hernández-Molinero (LSC, Canfranc) et al., JCAP 09 (2024) 033.

<u>Cross-correlations of the Cosmic Neutrino Background: HR-DEMNUni simulation analysis</u> Beatriz Hernández-Molinero (LSC, Canfranc) et al., e-Print: 2407.13727.

<u>Development of large-volume ¹³⁰TeO₂ bolometers for the CROSS 2ß-decay search experiment</u> F. T. Avignone (U. south Carolina, Columbia) et al., JINST 19 (2024) 09.