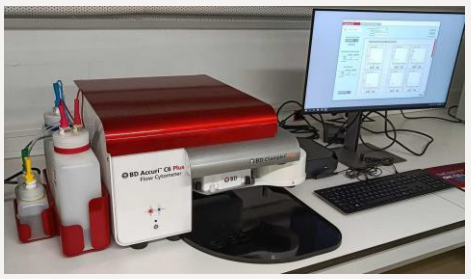
LSCNews

Laboratorio Subterráneo Canfranc

Newsletter 4/4 – Year 2023

Acquisition of a Flow Cytometer

The LSC acquired a benchtop flow cytometer for the LSC Biology Platform.



The instrument, with 2 excitation lasers of 488 and 640 nm, 2 scattering detectors and 4 fluorescence detectors, will be used on biology exp. in applications such as immunophenotyping, analysis of the phases of the cell cycle, apoptosis or proliferation assays in cosmic silence.

NEXT-100 Detector Completed

The assembly and commissioning of the NEXT-100 detector was completed on 22 November. Over the next few months, it will work at low pressure to test and calibrate the instrumentation. The detector aims to further validate NEXT's technology with 100kg of Xe gas.

New Additions to the LSC

During the last quarter of 2023 the LSC had three new additions.

Enrique Roig
Data Scientist

David Méndez
Engineer

Víctor Pérez
Cryogenics Technician

Other relevant LSC Publications:

Demonstration of Event Position Reconstruction based on Diffusion in the NEXT-White Detector

NEXT Collaboration•J. Haefner(Harvard U.) et al. (Nov 6, 2023)
e-Print: 2311.03441 [physics.ins-det]

Design, characterization and installation of the NEXT-100 cathode and electroluminescence regions

NEXT Collaboration•K. Mistry(Texas U., Arlington) et al. (Nov 6, 2023)
e-Print: 2311.03528 [physics.ins-det]