International Workshop on Cosmic-Ray Muography (Muography2021)



Contribution ID: 49 Type: Plenary talk

Muography activities at CEA-Saclay

We will review the different activities and recent developments of muography at CEA-Saclay. In the last year, several new telescopes have been manufactured thanks to the partnership with a PCB company. Up to 12 telescopes can now be run in parallel on various projects. The latest improvements include a spatial resolution lower than 200 microns and a gas consumption yielding about 2L/day only. On the software side, a 3D algorithm combining 2D projections was successfully tested on simulated and real data. An old nuclear reactor is currently being imaged in the South of France, with already 13 projections achieved. By March 2022, the number of projections will reach more than 30, perhaps the largest number ever obtained in muography of a single object. A muon metrology experiment was also recently conducted in lab, with another in preparation on a whole building.

Primary authors: PROCUREUR, Sebastien (Université Paris-Saclay (FR)); Dr ATTIÉ, David (CEA-Saclay); Dr GOMEZ, Hector (CEA-Saclay); Mrs LEHURAUX, Marion (CEA-Saclay); Dr MANDJAVIDZE, Irakli (CEA-Saclay); Mr MAS, Philippe (CEA-Saclay)

Presenter: PROCUREUR, Sebastien (Université Paris-Saclay (FR))

Session Classification: Applications

Track Classification: Applications