



Contribution ID: 172

Type: **Talk**

The present status of the LAG experiment

Wednesday 7 September 2022 16:10 (20 minutes)

LAG (Liquid Actuated Gravity) is an R&D experiment, funded by the Italian National Institute of Nuclear Physics (INFN), for the development and testing of a new actuation technique for gravity experiments, based on a liquid field mass. The basic idea of the experiment is to modulate the gravitational force acting on a test mass by controlling the level of a liquid in a suitable container, thereby producing a periodically varying gravitational force without moving parts (apart from the liquid level) close to the test mass. The first scientific goal is to improve upon present limits on the gravitational inverse-square law in the mm to cm distance region. A prototype has been assembled for testing with a torsion pendulum facility in Napoli, and we are now taking data. We will describe the apparatus, report on present results and describe the next steps, and the scientific perspectives for the LAG experiment.

Is this abstract from experiment?

Yes

Name of experiment and experimental site

LAG (Liquid Actuated Gravity) - INFN-Napoli

Is the speaker for that presentation defined?

Yes

Details

Luciano Di Fiore, Dr, INFN-Napoli, Italy, <https://www.na.infn.it/>

Internet talk

Maybe

Author: DI FIORE, Luciano

Presenter: DI FIORE, Luciano

Session Classification: Cosmology, Astrophysics, Gravity, Mathematical Physics

Track Classification: Main topics: Cosmology, Astrophysics, Gravity, Mathematical Physics