

First event at the Halle d'essais



📖 FACULTY OF SCIENCE, TECHNOLOGY AND COMMUNICATION

European comparison of absolute gravimeters

3 to 12 November 2015

Halle d'essais, Belval Campus

Presentation

Absolute gravimeters are sophisticated instruments which enable the measurement of local and instantaneous gravity. They are used in metrology to calibrate pressure sensors or to redefine the kilogram in terms of Energy. In geophysics, gravity measurements are used to monitor the motion of magma underneath volcanoes, the melting of the Greenland ice sheet, tectonic deformations during an earthquake, etc.

There are currently some 50 of these instruments worldwide and to ensure they are operating properly, they must be regularly compared to each other. Due to its recognised expertise and the quality of its infrastructures, the Geophysics Laboratory of the University of Luxembourg was selected by the International Bureau of Weights and Measures to hold an event every two-year.

This year, the comparison is organised by the European Association of National Metrology Institutes (EURAMET) and the Geophysics Laboratory of the University of Luxembourg in the new Halle d'essais on Belval Campus. This building perfectly complies with the power and space requirements to accommodate up to 10 gravimeters operating simultaneously. Previously, the comparison used to take place in the Walferdange Underground Laboratory of Geodynamics.

This year, the following 21 institutions are participating in the 2015 edition:

Country	Institution
Austria	Federal Office of Metrology and Surveying (BEV)
Belgium	Royal Observatory of Belgium
Czech Republic	Geodetic Observatory Pecný
Finland	Finnish Geodetic Institute
France	CNRS – Géosciences Montpellier
	GET Toulouse / RESIF
Germany	Bundesamt für Kartographie und Geodäsie
	Leibniz Universität Hannover
Italy	ASI (Agenzia Spaziale Italiana)
	Istituto nazionale di Ricerca Metrologica
	Istituto Nazionale di Geofisica e Vulcanologia
Luxembourg	University of Luxembourg
Netherlands	Technical University of Delft
Poland	Institute of Geodesy and Cartography
	Faculty of Geodesy and Cartography - Warsaw University of Technology
Russia	Institute of Automation and Electrometry of Siberian Branch of the Russian Academy of Sciences
Slovakia	Slovak University of Technology in Bratislava
Sweden	Lantmäteriet
United Kingdom	NERC / Space Geodesy Facility
USA	National Geodetic Survey - NOAA
	Micro-g LaCoste

Opening

The opening of this event will take place on 4 November in the Halle d'essais, Belval Campus.

14.30 **Welcome Speech**

Paul Heuschling, Dean of the Faculty of Science, Technology and Communication, University of Luxembourg

14.45 **Short presentation of the metrology in Luxembourg**

Philippe Kadok, Project Officer, Bureau Luxembourgeois de Métrologie

15.00 **Absolute gravimeters: a key instrument for many applications**

Olivier Francis, Professor in Geophysics, University of Luxembourg

15.30 **Visit of the Halle d'essais & Meeting with the teams of the institutions**

16.00 **Coffee break**



How to come?

The official opening will take place in the Halle d'essais, Belval Campus.



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