## The GeMSE Low-Background Facility for Meteorite and Material Screening

GeMSE (Germanium Material and Meteorite Screening Experiment) is a large-volume gamma-ray spectrometer devoted to the screening of meteorite samples and the selection of materials for rare-event search experiments. Located underground at 620 m.w.e. and featuring a multi-layer shielding, its current background level is below 240 counts/day in the 100 - 2700 keV range.

GeMSE is an ideal platform for interdisciplinary use: The detector is operated fully autonomously (apart from sample changes and occasional LN<sub>2</sub> transports) and features a user-friendly analysis and simulation framework. The latter is able to import complex 3D geometries, such that uncertainties in the efficiency calculations can be greatly reduced. This is relevant for meteoritic samples with complicated shapes.

This talk will describe the facility, the calibration and data analysis methods, and will present results on recently measured samples in both fields.

Author: Mr RAMÍREZ GARCÍA, Diego (Albert-Ludwigs-Universität Freiburg)

**Presenter:** Mr RAMÍREZ GARCÍA, Diego (Albert-Ludwigs-Universität Freiburg)