LNCMI – Static and Pulsed High Magnetic Field Facility

François Debray 1*

¹ CNRS/LNCMI, Grenoble France *corresponding author: francois.debray@lncmi.cnrs.fr

The LNCMI [1] is one of the few facilities worldwide to offer access to magnetic fields in excess of what is made available by commercial companies.

LNCMI is the founder of the European Magnetic Field Facility (EMFL) [2] that gathers the four high field facilities in Europe: Dresden-Germany and Toulouse-France for pulsed field , Grenoble-France and Nijmegen-Netherlands for DC fields.

The LNCMI is a two site facility. In Toulouse, pulsed magnetic field are available with fields up to 100T produced by non destructive magnets.

In Grenoble DC magnetic fields up to 42 T are available for long duration experiments (several hours) thanks to the recent achievment of the hybrid magnet and of the upgrade of the power supply.

DC high field magnets available in Grenoble are modular. Consequently a wide range of space (diametre from 800 to 34 mm) are available for science.

We present the status of the facility and some examples of experiments performed at LNCMI in the domain of Magnetoscience

- [1] www.lncmi.cnrs.fr
- [2] https://emfl.eu/