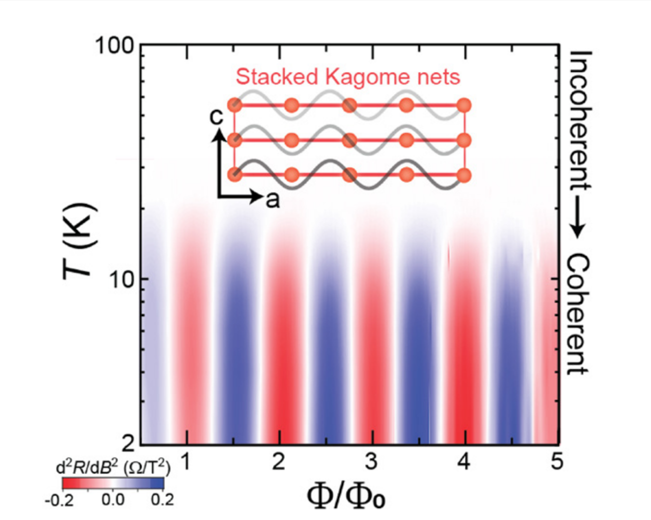
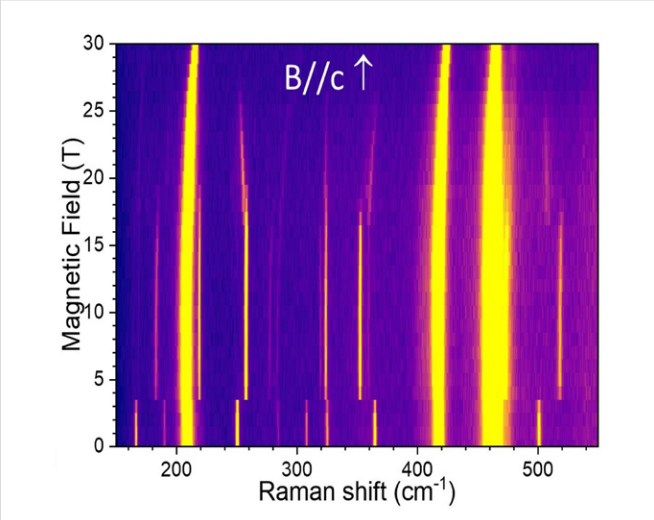
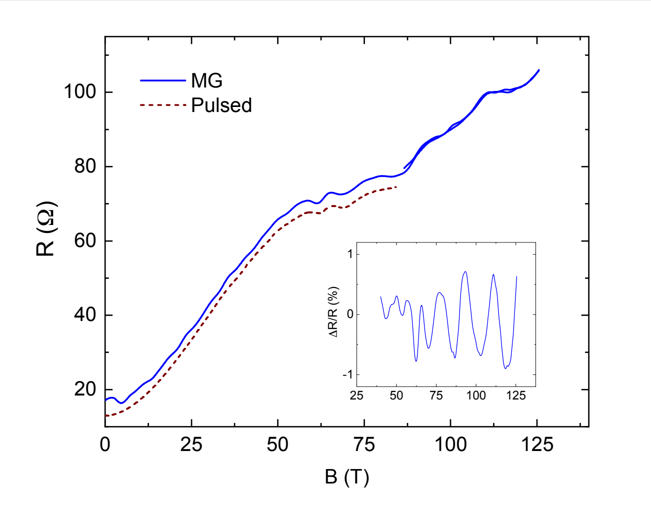
European Magnetic Field Laboratory

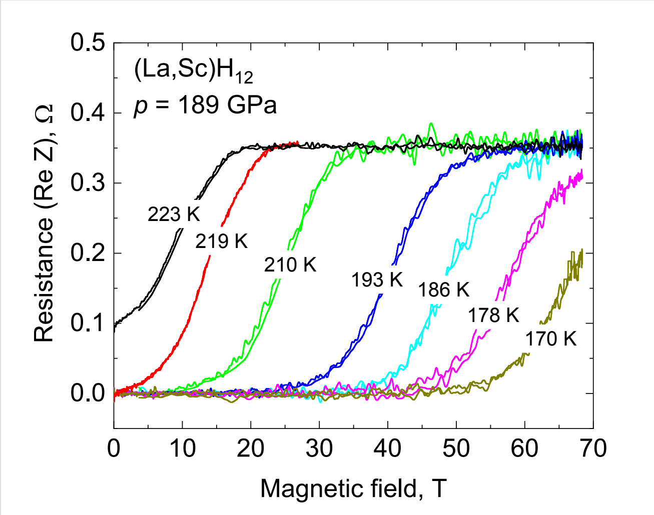
EMFLNEWS

N° 4/25









CONTENTS

DEAR READER

On behalf of the entire EMFL staff, let me first wish you a happy, successful, and healthy New Year with many great outcomes from your research done in high magnetic fields. As usual, we present four highlight examples of such impactful outcome on the following pages.

At the end of October, the highly successful ISABEL project ended. You may find information on our final activities as well in this issue: the last regional meeting in Spain at the Universidad Autónoma de Madrid, organized by Hermann Suderow, and our activities in bridging the gap to industry.

Another great success was achieving more than 30 T in a fully superconducting magnet. Within a cooperation between CEA, LNCMI, and HLD, we combined the 19 T low-temperature magnet at HLD with the high-temperature superconducting NOUGAT insert. This achievement opens up the possibility to offer our users energy-efficient experiments in static magnetic fields far beyond 30 T in the future.

Finally, you may mark the date of the next user meeting in your calendar: We plan this meeting for June 30, 2026, in Warsaw, Poland. The Selection Committee meeting will take place the day before.

Enjoy reading,

Jochen Wosnitza
Director HLD, Chairman EMFL

MEET OUR PEOPLE

Sandra Bak, HFML-FELIX

My name is Sandra Brookman-Bak, and I have just started working at HFML-FELIX. In my role as a safety specialist, I am responsible for ensuring compliance with occupational health and safety legislation. It is a broad domain that involves safeguarding both physical and psychological safety in the workplace. My work ranges from handling chemical safety issues to supporting ergonomic adjustments, like setting up a proper workstation chair. These priorities are determined through a risk assessment, which indicates where attention and resources are most needed.

This past December, I obtained my diploma as a senior safety specialist, with my thesis focusing on sensitizing and irritating substances used in the preparation of novel foods. These substances can cause lifelong allergies that cannot be reversed. I conducted the studies for my thesis in the laboratories of Wageningen University, where extensive research is being conducted into new alternative food products. Perhaps the next soybean or insect-based snack you will find in the store was developed here. Before working at Wageningen, I spent 16 years at Radboud University Medical Center as a lab analyst in the Hematology department. There, we prepared stem cells, performed various measurements, and ultimately provided cancer patients with stem-cell transplants after intensive treatments to help rebuild and strengthen their immune systems. So, I know the area around Radboud quite well, and I have already run into a few former colleagues.

› Safety specialist Sandra Bak on a via ferrata in Italy

Let me tell you a little more about myself: I live in the lovely town of Bemmel, just on the other side of the Waal. I am an active volunteer at the Theaterkerk in Bemmel. The church has been transformed into a theater located right in the heart of the town center. I work there in the technical team to help make every event something special. As a family, we spend every summer volunteering with the Dutch Mountaineering and Climbing Association (NKBV) to coordinate a base camp for families somewhere in Europe. This summer, we will be coordinating our fifth base camp! Our role is to create a welcoming atmosphere and encourage people to take part in mountain activities.

As I think about what else I could share, I find myself staring outside, watching the last snow disappear. It has been an eventful first week at work! I am very much looking forward to meeting everyone and becoming part of the HFML-FELIX and EMFL team.

WHEN ELECTRONS SING IN HARMONY — MANY-BODY INTERFERENCE IN KAGOME CRYSTALS

C. Guo, MPI-SDM, Hamburg, Germany, and S. Wiedmann, HFML-FELIX Nijmegen

Quantum coherence – the ability of particles to move in synchrony like overlapping waves – is usually limited to special states such as superconductivity, where electrons pair up and flow coherently. In ordinary metals, collisions quickly destroy such coherence. But in the kagome metal CsV_3Sb_5, after sculpting tiny crystalline pillars just a few micrometers across and applying magnetic fields, Aharonov-Bohm-like oscillations in the electrical resistance appear. The oscillations occur at regular intervals determined by the magnetic flux quantum that threads between adjacent kagome layers. This phenomenon effectively transforms the material into a nanoscale Aharonov-Bohm interferometer, stacked vertically along the crystal structure. As a result, it demonstrates that electrons interfere collectively, even remaining coherent much longer than would be predicted by single-particle physics.

Several features reveal the cooperative nature of this effect. As the magnetic field angle is changed, the oscillations abruptly switch between discrete frequencies rather than evolve smoothly. Even more striking, the coherence persists over distances longer than the electron mean free path, ruling out an explanation based on independent particles bouncing through the crystal. The size of the oscillations is also telling: Their amplitude closely matches other anomalous electronic responses previously reported in CsV_3Sb_5, hinting at a shared underlying mechanism that establishes intrinsic coherence in this material. Together, these findings shed new light on the still-debated correlated orders in kagome metals and position CsV_3Sb_5 as a rare platform, where long-range coherent charge transport emerges without superconductivity. More broadly, they suggest that collective electronic coherence may be far more versatile and widespread than previously thought, opening new directions for exploring correlated quantum matter beyond conventional paradigms.

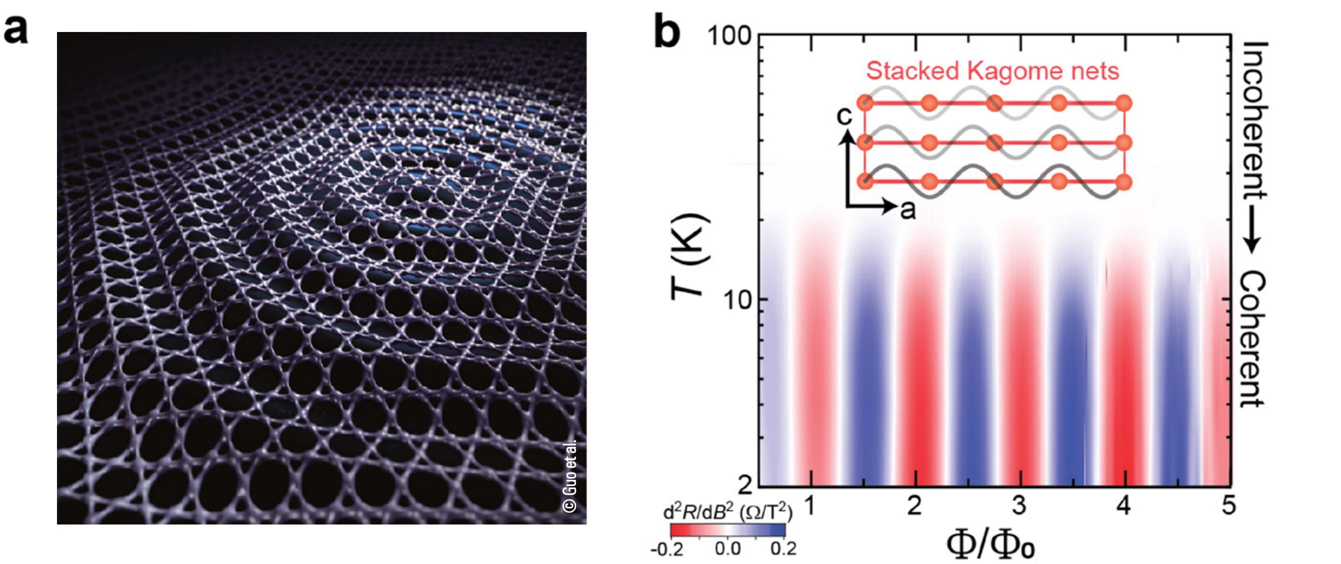


Figure: a) Illustration of long-range quantum coherence in a kagome metal. (b) The temperature dependence of magnetoresistance oscillations demonstrates quantum-coherent transport at low temperatures.

Many-body interference in kagome crystals, C. Guo, K. Wang, L. Zhang, C. Putzke, D. Chen, M. R. van Delft, S. Wiedmann, F. F. Balakirev, R. D. McDonald, M. G.-Amigo, M. Alkorta, I. Errea, M. G. Vergniory, T. Oka, R. Moessner, M. H. Fischer, T. Neupert, C. Felser, and P. J. W. Moll, **Nature 647**, 68 (2025).

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MAGNETIC PHASES AND ZONE-FOLDED PHONONS IN A FRUSTRATED VAN DER WAALS MAGNET

Amit Pawbake and Clément Faugeras, LNCMI-Grenoble, Yurii Skourski, HLD Dresden

On-site lattice frustration in certain magnetic compounds, featuring spin-spin interactions of various kinds between first, second, and further neighbors, leads to very rich magnetic phase diagrams comprising highly-degenerate disordered phases and complex spin order. Varying the temperature, magnetic field, or hydrostatic pressure, one can navigate through these exotic phase diagrams. Van der Waals magnetic materials are layered materials that can be thinned down to the monolayer limit, while retaining collective magnetic properties, different in nature from those of the bulk parent material. Depending on the lattice structure, nature, and strength of spin-spin interactions between different kinds of neighboring sites, these interactions may have antagonistic effects, each promoting a different kind of order. Such competition of interactions prevents simple (i.e., ferro- or anti-ferromagnetic) spin orders to develop, and instead favors nontrivial spin arrangements. Bulk chromium oxychloride CrOCl falls into this class of compounds: It is a frustrated magnet, possessing a rich phase diagram, whose phases have only been partly assigned.

Under external magnetic fields different magnetic phases, with magnetic cells up to five times larger than the crystallographic unit cell, are stabilized (figure 1 left) and induce a zone folding of the phonon modes. This allows us to 'read' the magnetic ground state by tracing the evolution of the zone-folded phonon modes as shown in figure 1 (right). These results demonstrate the strong coupling between nontrivial spin configurations and lattice vibrations, highlighting the role of magnetoelastic interactions in frustrated magnets. Our findings expand the understanding of 2D magnetism, particularly in materials, where frustration leads to unconventional spin states.

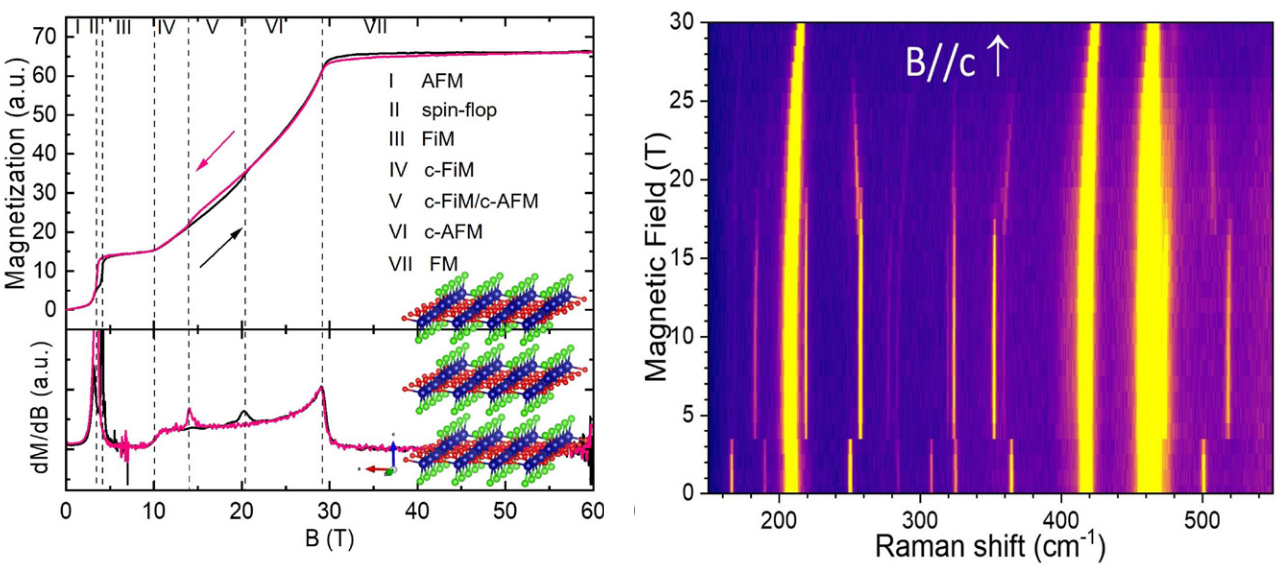

Figure 1: (left) Low-temperature magnetization of bulk CrOCl showing a magnetization plateau and two hysteresis cycles indicating competing magnetic phases. Inset: Crystal structure of bulk CrOCl. (Right) Low-temperature magneto-Raman scattering of bulk CrOCl showing a series of zone-folded phonon modes.

Magnetic phases and zone-folded phonons in a frustrated van der Waals magnet, A. Pawbake, F. Petot, F. Le Mardelé, T. Riccardi, J. Lévêque, B. A. Piot, M. Orlita, J. Coraux, M. Hubert, J. Dzian, M. Veis, Y. Skourski, B. Wu, Z. Sofer, B. Grémaud, A. Saúl, and C. Faugeras, **ACS Nano 19**, 23693 (2025).

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FIRST OBSERVATION OF QUANTUM OSCILLATIONS BY TRANSPORT MEASUREMENTS IN SEMI-DESTRUCTIVE PULSED MAGNETIC FIELDS UP TO 125 T

Sven Badoux, David Vignolles, and Cyril Proust, LNCMI-Toulouse, Bertrand Reulet, Institut Quantique, Sherbrooke, Canada

High magnetic fields have proven instrumental in exploring the physical properties of condensed matter, leading to groundbreaking discoveries such as the quantum Hall effect in 2D heterostructures and quantum oscillations in cuprate superconductors. The ability to conduct precise measurements at progressively higher magnetic fields continues to push the frontiers of knowledge and enables new discoveries. In this work, we present the development of a microwave technique for performing two-point transport measurements in semi-destructive pulsed magnetic fields (up to 125 T) and at low temperatures (down to 1.5 K) with unprecedented sensitivity leading to, notably, the first observation of Shubnikov-de-Haas oscillations in WTe_2 at magnetic fields beyond 100 T.

Detecting quantum oscillations (QOs), which probe the topology of the Fermi surface of metals, is challenging because their amplitude strongly depends on temperature and is often small compared with the magnetoresistance background. A good signal-to-noise ratio is, therefore, essential, which we recently considerably improved in the Toulouse megagauss installation. The setup was tested on various samples, including InAs and $La_{2-x}Sr_xCuO_4$. Here, we focus on measurements of the Weyl semimetal WTe_2. Its Fermi surface consists of two pairs of electron-like pockets and two pairs of hole-like pockets, corresponding to QO frequencies ranging from 88 to 158 T. The pockets are in a nested Russian-doll arrangement, allowing the observation of magnetic breakdown between pockets of the same sign, leading to QO frequency combinations.

In the figure, we compare measurements on WTe_2 performed in the megagauss installation up to 125 T (blue) with data from a conventional pulsed-field experiment up to 86 T at 20 K (dashed line). The reproducibility of the megagauss data during up and down field sweep above 88 T indicates a negligible heating in this field range. Furthermore, the QOs observed up to 86 T are in excellent agreement with the data using the conventional pulsed-field magnet. Comparing the amplitudes of the QOs allows us to estimate the heating of the sample at the beginning of the pulse to be about $\Delta T \approx 17$ K. This value aligns well with our simple adiabatic model, which predicts $\Delta T \approx 18$ K.

In the inset of the figure, we show the oscillatory part of the signal up to 125 T as a function of magnetic field. We resolved two QO frequencies at approximately 450 and 620 T. They originate from a magnetic breakdown between the four main pockets. The QO with 620 T was never observed before.

In conclusion, we developed a technique to measure electrical transport with excellent signal-to-noise ratio in the megagauss installation, leading to the first observation of quantum oscillations in a megagauss experiment above 100 T. To reduce heating of the sample, work is in progress to reduce its size, in particular using the focused ion-beam technique. Our work paves the way for studying transport properties in quantum materials at fields up to 200 T.

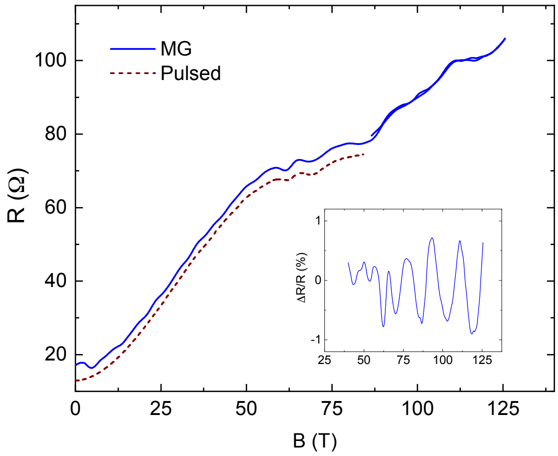

Figure: Field-dependent transport data using a semi-destructive pulsed field (solid blue line) showing quantum oscillations up to 125 T. The base temperature before the pulse was 2.5 K. The dashed line shows resistance data at 20 K using a conventional pulsed-field magnet for comparison (the data are shifted for clarity). Note the reproducibility of the megagauss data for up and down field sweep above 88 T. Data for the up sweep below 88 T are too noisy to make a comparison because of trigger noise. Inset: QOs as a function of magnetic field with a spline background subtracted.

First observation of quantum oscillations by transport measurements in semi-destructive pulsed magnetic fields up to 125 T, M. Massoudzadegan, S. Badoux, N. Bruyant, I. Gilmutdinov, I. Haik-Dunn, G. de Oliveira Rodrigues, N. Lourenco Prata, A. Zitouni, M. Nardone, O. Drachenko, O. Portugall, S. Wiedmann, B. Fauqué, D. Vignolles, B. Reulet, and C. Proust, **Rev. Sci. Instrum. 96**, 113904 (2025).

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NEAR-RECORD SUPERCONDUCTIVITY IN $(La,Sc)H_{12}$

Toni Helm, HLD Dresden

Very recently the research field of superconductivity has experienced a push forward by the discovery of high-temperature superconductivity in so-called superhydrides, i.e., hydrogen-rich metallic compounds. Pressure-stabilized polyhydrides are a new rapidly growing class of high-temperature superconductors exhibiting record superconducting critical temperatures up to 200-250 K and upper critical magnetic fields reaching 200-300 T. Prominent compounds are, e.g., H_3S, YH_6, and LaH_{10}. Their synthesis is realized by pulsed laser heating of various alloys and intermetallics with hydrogen or ammonia borane (NH_3BH_3) inside of diamond anvil cells. The latter are required in order to establish pressures of more than 200 GPa, which limits available experimental techniques for the study of the fundamental properties of these materials. More recently, compressed ternary (X,Y)-H polyhydrides have come into focus. The general and, as yet, unsolved problem of ternary superhydrides boils down to the question: "Can T_c in ternary polyhydrides be higher than in binary ones and reach room-temperature values?"

In a comprehensive study, researchers from China and Europe studied the formation of ternary lanthanum-scandium superhydrides at pressures up to 230 GPa. In this system, room-temperature superconductivity has recently been predicted for both the binary phase ScH_{12} and for the ternary one $LaSc_2H_{24}$ (XH_8 type). One of the key findings is that the new compound, cubic $(La,Sc)H_{12\pm1}$, exhibits a clear superconducting transition in the electrical resistance starting at around 244-248 K.

In this compound, virtually no magnetoresistance is observed in fields up to 68 T (figure 1a). The upper critical field exceeds 70 T already at temperatures below 170 K (figure 1b).

The investigated samples of $(La,Sc)H_{12}$ demonstrate pronounced superconducting diode and SQUID-like effects at a record-high temperature of 233 K, which opens up prospects for the use of superhydrides in compact electronics. Furthermore, the analysis reveals the possible formation of a lower hexagonal polyhydride $(La,Sc)H_{6-7}$, which can potentially account for the drop in electrical resistance observed near 274 K. This anomaly between 265-290 K also appears in radio-frequency transmission measurements and may be of superconducting nature. Active research on the La-Sc-H system continues at higher pressures (250-280 GPa) to determine whether it may exhibit room-temperature superconductivity.

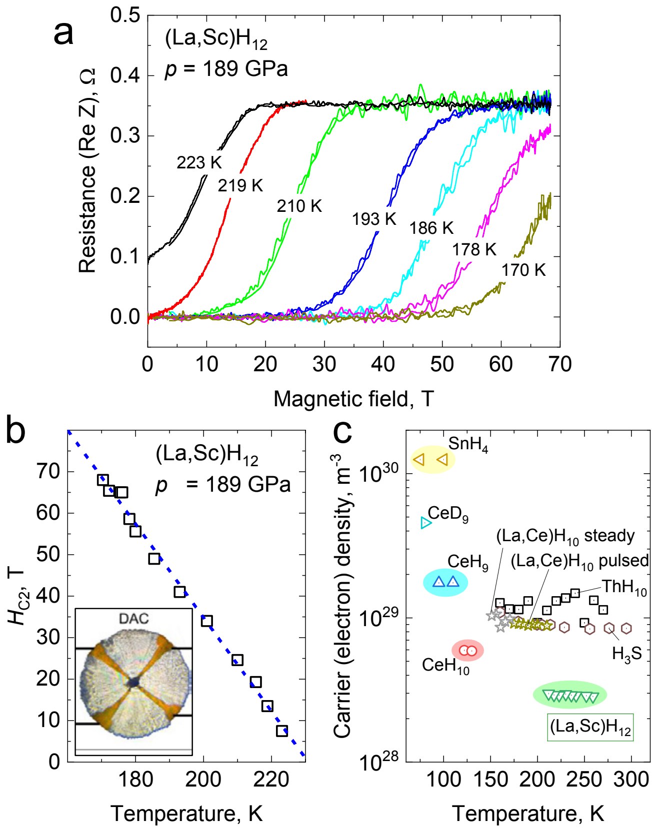

Figure 1: (a) Dependence of the real component of the electrical resistance of a $(La,Sc)H_{12}$ sample in pulsed magnetic fields up to 68 T at various temperatures from 223 K to 170 K. (b) Temperature dependence of H_{C2}. Inset: Photograph of the sample placed on top of the diamond anvil attached to four leads. (c) Charge-carrier (electron) concentration in various superhydrides according to Hall-effect measurements.

Ternary superhydrides under pressure of Anderson's theorem: Near-record superconductivity in $(La,Sc)H_{12}$, D. V. Semenok, I. A. Troyan, D. Zhou, A. V. Sadakov, K. S. Pervakov, O. A. Sobolevskiy, A. G. Ivanova, M. Galasso, F. G. Alabarse, W. Chen, C. Xi, T. Helm, S. Luther, V. M. Pudalov, and V. V. Struzhkin, **Adv. Funct. Mater. 35**, 2504748 (2025).

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RESULTS OF THE THIRTY-FOURTH CALL FOR ACCESS

The 34th call for access ended on November 15, 2025. After that, the ranking of the proposals on a competitive basis began and was completed by December 15, 2025.

Our four facilities

- LNCMI - Grenoble - France: Static magnetic fields to 37 T
- HFML - Nijmegen - the Netherlands: Static magnetic fields to 38 T
- HLD - Dresden - Germany: Pulsed magnetic fields to beyond 95 T
- LNCMI - Toulouse - France: Pulsed magnetic fields of long duration to over 99 T, and on the microsecond scale to beyond 200 T

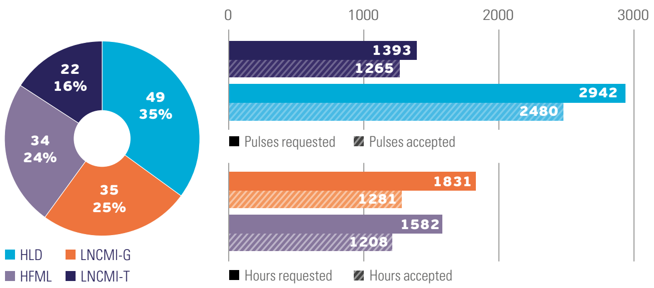
are open to users worldwide. EMFL operates a joint transnational access program, which grants full access to these installations and all associated scientific infrastructure to qualified external users, supplemented by the necessary support from our scientific and technical staff on site.

For this 34th call, we received 140 applications from 22 different countries. From these, 6 are proposals for dual access with regional partner laboratories, 5 are asking for technical-development access, 2 for fast-track access (received from July to December 2025). First-time users submitted 32 proposals. We introduced these novel access procedures within the EMFL-ISABEL project.

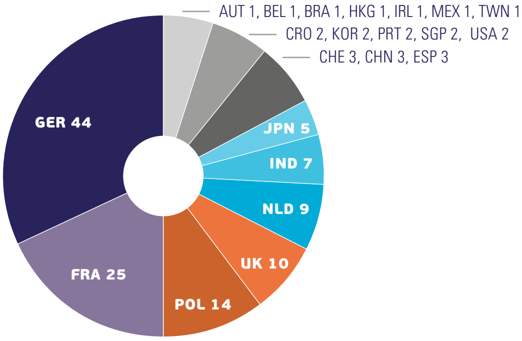
The Selection Committee consists of 18 specialists covering the following five scientific topics:

- Metals and Superconductors (36 applications),
- Magnetism (61 applications),
- Semiconductors (25 applications),
- Soft Matter and Magnetoscience (6 applications),
- Applied Superconductivity (12 applications).

Distribution by facilities Number of applications



Distribution by country of PI affiliation



Besides of ranking the proposals, the committee members decide on the number of accepted magnet hours and number of pulses.

Evaluation of applications

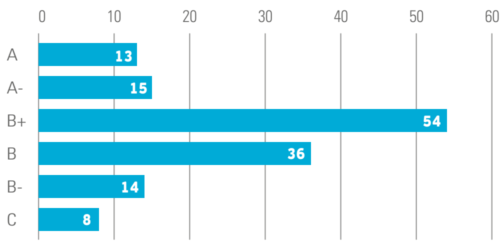
The proposals are ranked in three classes:

A (excellent proposal to be carried out),

B (should be performed but each facility has some freedom considering other constraints),

C (poorly crafted proposal or one that does not need any of the four unique high-magnetic-field laboratories).

In the B category, the ranking + or - serves as a recommendation to the facility. This degree of freedom is necessary to allow the facilities to consider other aspects such as available capacity and equipment necessary for the successful outcome of a project.



NEXT CALL:
Launch: April 15, 2026
Deadline: May 15, 2026

REGIONAL MEETING IN SPAIN

Spain brought the series of Regional ISABEL Meetings to a close, following previous sessions in Switzerland, the Czech Republic, United Kingdom, Italy, and Estonia. A total of around 225 participants took part in these meetings, which commenced in Basel, Switzerland as part of the Annual Meeting of the Swiss and the Austrian Physical Societies in September 2023. By holding the meetings in different European countries than those where the EMFL is based, the focus is placed on external users by bringing together existing users with major representatives of EMFL infrastructures and recruiting new users for EMFL.

Organized by scientists from the Universidad Autónoma de Madrid (UAM), the Universidad de Salamanca, as well as the Institute of Materials Science of Barcelona (ICMAB-CSIC), participants from Spain, France, UK, the Netherlands, Estonia, Poland, and the Czech Republic gathered at the ISABEL regional meeting at the UAM Faculty of Science on October 23 and 24, 2025. The main research focus of the program, where leading scientists, engineers, and early-career researchers met to explore transformative advances in high magnetic field research and its interdisciplinary applications, can be listed as follows: Quantum materials under extreme conditions, next-generation magnet technologies, superconductivity, and graphene.

The UAM's experimental equipment

In their presentations, the Spanish scientists reported on their topical materials-research projects. The efforts of the Madrid group to offer experiments in high magnetic fields were highlighted at the poster session and during laboratory visits. Participants had the opportunity to learn about the 20/22 T magnet with Scanning Tunnelling Microscopy, another 17 T facility, and further high-field equipment available at the UAM through the ISABEL-funded dual-access mode. A lively discussion focused on the possibilities offered by new ultra-small designs of Scanning Tunneling Microscopes at high magnetic fields. During a visit to the machine shops, it was possible to take a closer look at a metal 3D printer, a CNC lathe and milling machine, water jet cutting, and He liquefaction.

The EMFL was represented by Charles Simon. As former LNCMI director, he provided insights into the latest achievements of the hybrid-magnet project in Grenoble, to name just one example › **EMFLNews 3/25**. The Spanish groups presented results obtained with experiments at one of the four EMFL infrastructures. They discussed future collaborations and options in the fields of graphene, high-temperature superconductors, magnetism, and optics. The IMDEA Nanoscience Institute participated actively, as the coordinator of a major program in nanomagnetism of the region of Madrid (Mag4TIC) and by sponsoring materials and helping in the organization. The meeting gathered a very active EMFL-related research community in a country, which is traditionally strongly attached to magnetism.

› Group photo taken in front of the Faculty of Science of the Universidad Autónoma de Madrid (UAM).

› Participants in the lab tour

› **ifimac.uam.es/conferences-events/conferences/regional-meeting-on-high-magnetic-field-science-and-technology/**

› **webs.fmc.uam.es/lbtuam.group**

NOUGAT MAGNET EXCEEDS 30 T IN FULLY SUPERCONDUCTING CONFIGURATION

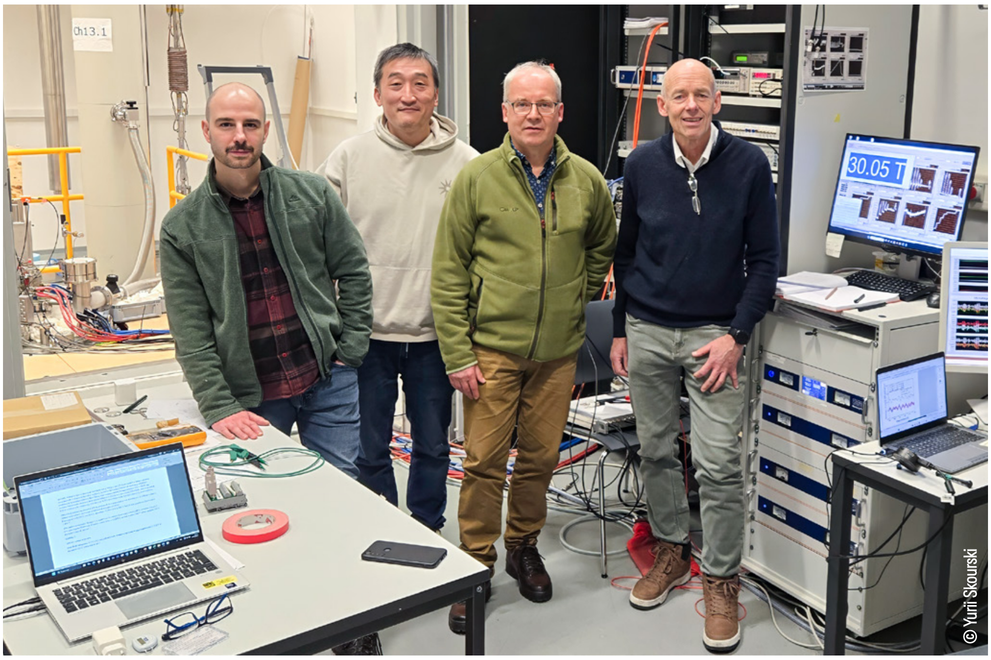
The combination of low-temperature (LTS) and high-temperature superconducting (HTS) technologies enables the generation of high static magnetic fields under optimized conditions for field stability, sustainability, and energy efficiency. It has the potential to unlock new avenues for scientific research and technological applications with significant socio-economic impact. The EMFL user laboratories plan to equip their facilities with such all-superconducting high-field magnets in order to be able to carry out user experiments with highest-quality requirements.

In 2019, scientists from EMFL and CEA at LNCMI Grenoble succeeded in generating 32.5 T using a HTS magnet as part of the NOUGAT (NOUvelle Génération d'Aimants pour la production de Teslas) project › **EMFLNews 1/19**. Now, the NOUGAT HTS magnet has been tested for the first time in a fully superconducting configuration at the HLD in Dresden. When coupled with a wide-bore (140 mm) LTS 19 T magnet, produced by Oxford Instruments, it achieved a central magnetic field of 30.05 T. This milestone represents a fundamental step forward in understanding the interactions between coupled superconducting coils in the generation of ultra-high magnetic fields. During the tests, the LTS magnet provided a background field of 18 T, which was then enhanced by an additional 12.05 T by the HTS magnet. Both magnets were not yet operating at their maximum performance, leaving room for further improvements.

FASUM - Forty Tesla All Superconducting User Magnet

The French consortium, including LNCMI and CEA, aims to achieve even higher magnetic fields in the future. The goal of the Equipex FASUM project is to develop the world's first fully superconducting magnet capable of generating a static field of 35-40 T for user projects. The magnet will consist of an advanced HTS insert and an LTS outsert, again provided by Oxford Instruments. The design of the HTS insert will follow the same concept as that used for the NOUGAT HTS magnet, incorporating multiple double-coils wound in pancake geometry and stacked on top of each other. REBCO ($REBa_2Cu_3O_{7-\delta}$, where RE represents a rare-earth element) tape will be used as HTS conductor, employing the metal-as-insulation (MI) coil technology. MI technology exploits the fact that the superconducting current takes the resistance-free path in the HTS band, but as soon as superconductivity breaks down, it spreads throughout the entire normal-conductive coil volume, thereby preventing local overheating.

The successful tests in Dresden represent an important step towards realizing the FASUM magnet, enabling a better understanding of the mutual magnetic and mechanical interactions between the two nested HTS and LTS superconducting magnets. This achievement also reinforces the development of the metal-as-insulation coil technology pioneered at CEA.



› (From left to right): Francesco Stacchi (CEA, Saclay), Jung-bin Song and Xavier Chaud (LNCMI-Grenoble), as well as Thomas Herrmannsdörfer (HLD) during the successful test phase of the all-superconducting high-field magnet NOUGAT at the HLD in Dresden beginning of December 2025.

BRIDGING THE GAP WITH INDUSTRY

Inès Dupon-Lahitte, EMFL Industrial Liasion Officer and ISABEL project manager

The ISABEL project ended in October 2025. This ambitious Horizon 2020 project aimed to strengthen the long-term sustainability of the EMFL through realizing three main objectives, one of which was to bridge the gap with industry to reinforce the socio-economic impact of the EMFL. This article is an overview in figures of what happened during the project within the last five years to achieve this objective.

4.9 million euros

ISABEL project funding,
supported by the European Commission

18

international partners from 10 different countries:
6 from industry, 12 from academia.
Coordinator: CNRS – LNCMI

49

deliverables, of which 29 are available on the following website
❯ **emfl.eu/isabel/documents**

14

industrial exhibitions or scientific conferences attended. We met various companies and have ongoing collaborations thanks to the contact during those exhibitions and through BtoB meetings during the Big Science Business Forum (BSBF) in Granada (Spain) and Trieste (Italy) as well as "Rendez-vous Carnot" meetings in Lyon and Palaiseau (France). We also sponsored scientific conferences together with industry to present successful collaborations.

50.000 euros

allocated to two innovation projects, organized by Tino Gottschall (HLD) and Simon Tardieu (LNCMI-Toulouse). Whereas the project DDMC in Dresden focused on the Development of a Demonstrator for Multi-caloric Cooling based on pulsed magnetic fields, the project C²WiHiT (Composite Copper Wires High Temperature) aimed to research and develop coils that can be used in a temperature set ranging from 213 to 1073 K.

3

webinars realized to raise staff awareness and train them on intellectual property rights and societal issues, available online. We also analyzed the way each EMFL facility transfers technology and knowledge towards society, directly or through collaboration with industrial partners.

Over 100

persons who joined the EMFL industrial partners' club (IPC).

130

pages in the skill map. Two editions of our EMFL skill map, regrouping all skills, expertise, and know-how that were created to better communicate about the EMFL and our scientific and technical teams.
❯ **emfl.eu/isabel/industry/emfl-industrial-skill-map**

3

articles in specialized press
about the EMFL, our projects, and expertise.

12

articles in the EMFLNews,
presenting our partners, our cooperation, and activities during the project.

Funded by the European Union

This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 871106.

UPCOMING EVENTS

© Mtmdfan

Castillo San Felipe del Morro, most commonly known as El Morro, in San Juan, Puerto Rico.

1 DPG Spring Meeting of the Condensed Matter Section, Dresden, Germany, March 8-13, 2026.
dresden26.dpg-tagungen.de

2 Joint March Meeting and April Meeting (APS Global Physics Summit), Denver, USA, March 15-20, 2026.
summit.aps.org

3 International Magnetics Conference (INTERMAG 2026), Manchester, UK, April 13-17, 2026.
intermag2026.org

4 11th International Conference on Superconductivity and Magnetism (ICSM2026) & 4th International Conference on Quantum Materials and Technologies (ICQMT2026), Ölüdeniz-Fethiye, Turkey, April 19-26, 2026.
icsmforever.org

5 The European Conference Physics of Magnetism (PM'26), Poznan, Poland, June 22-26, 2026.
ifmpan.poznan.pl/pm26

6 27th International Conference on Science and Technology of Synthetic Electronics Materials (ICSM 2026), Rio de Janeiro, Brazil, July 19-24, 2026.
icsm2026.com

7 Materials and Mechanisms of Superconductivity (M2S 2026), Stuttgart, Germany, July 19-25, 2026.
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