



Copyright: Bernd Schröder, HZDR The above picture illustrates the excitation of the magnon-phonon Fermi resonance in antiferromagnetic CoF₂ using THz radiation, as described in this recent paper: <https://www.nature.com/articles/s41467-024-49716-w>

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EDITORIAL

Dear Reader, dear friends of FELs,

This Newsletter, coming out shortly after New Year, will be unusually short, and there is a very good and nice reason for this: we take the freedom to send you, in addition or instead, the brochure “Free-Electron Lasers: Delivering brilliant science – Breakthroughs from the last 10 years”, which originated over the past year. It was initiated through a joint effort of the FELs of Europe Steering Committee and the Strategy Group 2 (SG2) of LEAPS (League of European Accelerator-based Photon Sources). We are very grateful to Anton Barty from DESY and Serguei Molodtsov of the European XFEL as well as the Communication Group of the European XFEL, who did the main work to put this together, of course with input from other FEL facilities. You are welcome to forward this brochure to anybody who may be interested, also non-specialists, funding agencies and other stakeholders. Printed copies are also available on request.

What other important things happened last year? As our main event we had a very nice Science at FELs Conference near and in Paris with around 100 participants – at Synchrotron SOLEIL and at Sorbonne Université Paris (Jussieu) in June 2024, followed by the Forum on Advanced FEL Techniques. Looking ahead to 2025 there will be the PhotonDiag Conference in Liverpool, UK, September 2-4, 2025, and we are also in the process of planning another edition of our “FELs of Europe Topical Workshop on Selected Problems in FEL Physics: from soft X-rays to THz”, most likely in Grado, Italy, September 24-26, 2025.

At the moment we are also in the process of extending our Memorandum of Understanding (MoU), which represents the basis for our activities, for another six years until 2030.

For news updates, events and deadlines, please take a look at our webpage: www.fels-of-europe.eu.

With this I wish you a happy and prosperous New Year with lots of exciting developments in FEL science and technology.



About FELs of Europe

FELs OF EUROPE is an initiative of the ESFRI projects EuroFEL and European XFEL. It is a collaboration of all free electron laser (FEL) facilities in Europe, with the goal to meet technological and scientific challenges of these novel and rapidly developing technologies, and to provide a worldwide unique, pan-European research infrastructure that enables exploiting the full scientific potential of these unique accelerator based short-pulse light sources. The collaboration includes 14 facilities in 10 countries.

All members are either operating or developing free electron laser (FEL) facilities and/or advanced short-pulse light sources (SPS), based on accelerator technologies. Due to their unique properties, these light sources provide a step change in the ability to address research needs across the disciplines of physics, chemistry, materials, and life sciences. FELs will improve our understanding of processes on a molecular level, leading to development of new materials and methods for tomorrow's technological advancement, clean environment, sustainable energy, and health care.

FELs OF EUROPE will facilitate the enhancement and exploitation of the full scientific potential of FELs in an efficient way by promoting joint technical development and collaborating closely with users and related communities. It will promote efficient open access to the research infrastructure and optimal conditions for users.

More info at: www.fels-of-europe.eu

CURRENT AND UPCOMING CALLS FOR PROPOSALS

www.fels-of-europe.eu/user_area/call_for_proposals

For experiments at FERMI

Deadline: 31 May 2025

For experiments at FELBE

Deadline: 24 March 2025

For experiments at FELIX

Deadline: 15 May 2025

For experiments at FLASH

Deadline: 1 March 2025

For experiments at SwissFEL

Deadline: 15 March 2025

For experiments at MAX IV

Deadline: 26 February 2025

UPCOMING EVENTS

The next PhotonDiag Conference will take place in Liverpool, UK, September 2-4, 2025

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<https://www.fels-of-europe.eu/e212752/e214606/e216453/>

IMPRINT

Publisher: FELs OF EUROPE, chaired by Serguei Molodtsov, Scientific Director European XFEL. European XFEL GmbH, Holzkoppel 4, 22869 Schenefeld (Germany)

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