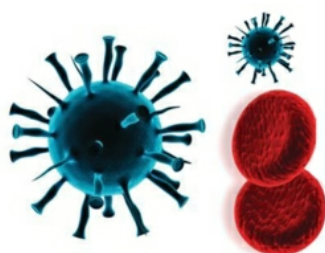


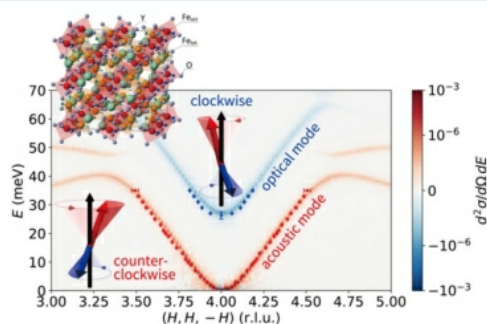
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## HIGHLIGHTS AND SCIENCE NEWS

**ILL research response to Covid-19**

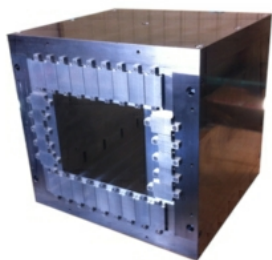
As with HIV before it, Europe's advanced neutron sources, including ILL, are making an essential contribution to understanding SARS-CoV-2. Neutron scattering's particular role here is to provide unique information on various aspects of the host-pathogen interaction. Deuteration facilities and shared biology and soft matter facilities on the the EPN campus contribute to this unique research opportunity. ILL scientists have worked closely with their collaborators to prepare series of partially deuterated samples and performed 6 campaigns of SANS, reflectometry and spectroscopy measurements in the last cycle, using Director's Discretionary Time (DDT). About a dozen COVID-related proposals were received in the recent proposal round.

For rapid access to beam time, Director's Discretionary Time (for full experiments) and Easy Access (for short measurements) should be used - [Read more](#)

**Magnificent magnons**

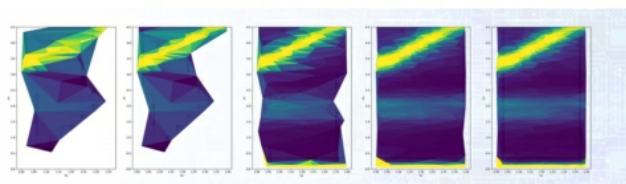
Experiments at ILL have for the first time fully exposed the complex magnetic behaviour of a synthetic crystalline material called yttrium iron garnet (YIG) using one of the ILL's polarised neutron spectrometers, IN20. Understanding, manipulating and exploiting the intriguing magnetic behaviour of YIG could open the door to the next, advanced generation of communication and information-processing devices.

[Read more](#)

**New design breaks the polarisation record – again!**

The ILL has now implemented the best neutron polariser in the world – it is more compact and cheaper than others because of its size and able to reach nearly 100% polarisation. It is set to be implemented at a number of facilities in the world to create better particle physics experiments to improve our understanding of the Universe.

[Read more](#)

**Machine Learning at ILL: First autonomous steps of the neutron spectrometer ThALES**

A self-learning algorithm developed by the CAMERA team at Lawrence Berkeley National Laboratory was recently commissioned and tested at the ILL for the first time. The algorithm took control over the measurement process, without human intervention, explored various accessible instrument configurations and reconstructed the signal with a strongly reduced number of total measuring points, compared to a conventional grid scanning technique, such as const-Q and const-E scans.

[Read more](#)

[MORE HIGHLIGHTS HERE !](#)

[A SELECTION OF RECENT ILL PUBLICATIONS](#)

## NEWS FOR USERS

**Panel Meetings and proposal rounds**

The November 2020 panel meetings were again run remotely. 246 proposals were selected out of the 629 submitted. These proposals will be scheduled mainly during the second reactor cycle in

2021.

At the request of the ILL Associates (FR, D, UK), in the current budgetary context, only users from those countries that currently contribute to the operational costs of the ILL have been awarded beam time in the user programme (80% of beam time). General exceptions are experiments that are conducted in the context of Director's Discretion time (DDT - 5% of the overall time).

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### Next proposal round

Proposal submission is open all year round on the [User Club](#).

Proposal deadline: 15 February 2021 (midnight central European time)

Subcommittee meetings: 29-30 March 2021;

Scientific Council: 31 March- 1 April.

A maximum amount of beam time will be made available for this proposal round, although backlogs on instruments will have to be cleared before the forthcoming, long shutdown.

Accepted proposals will be scheduled during the third cycle in 2021.

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### Reactor cycles

Three cycles in 2021 before one-year long shutdown. Their lengths and dates are still to be finalised and will be updated [here](#).

Because of the COVID-19 situation, the first cycle is being scheduling assuming that users will not come. Only those users whose experiments cannot take place without their presence will be authorised to come on site. The scheduling mode of the two other cycles will depend on the evolution of the sanitary situation. Working procedures and practical issues for users on site are regularly updated at [here](#).

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[Previous issues of the ILL newsletter](#)

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