

Welcome to the new ILL newsletter! From now on we will keep you informed on a more regular basis. Consult our [web site](#) and follow us on [Twitter](#)!

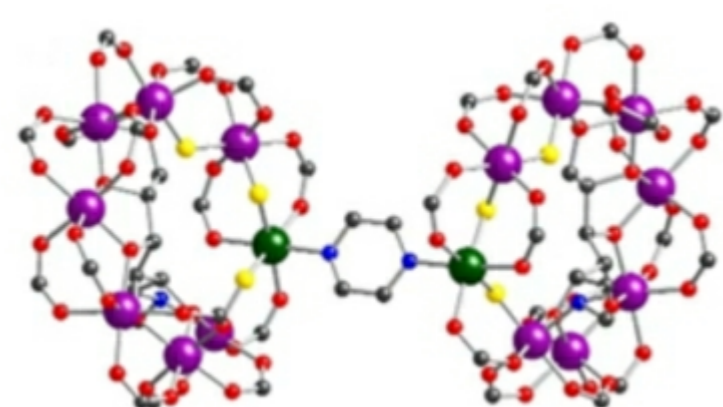
## SPOTLIGHTS ON SCIENCE



The role of neutrons for society over the 50 year life span of the ILL was highlighted in *Nature Physics* this month.



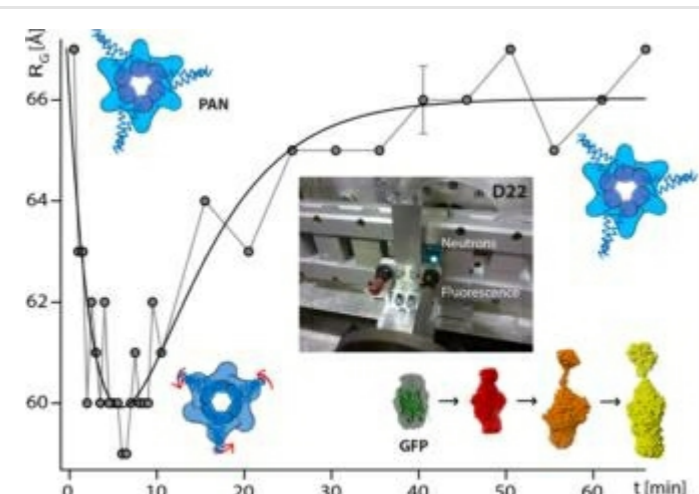
Recent ILL work trying to understand the secrets of extremophile bacteria like the ones decomposing the RMS Titanic was recently reported by the BBC.



A *Nature Communications* publication reports how a molecular magnet has been used as a benchmark system to investigate quantum entanglement between molecular qubits. [Read more.](#)



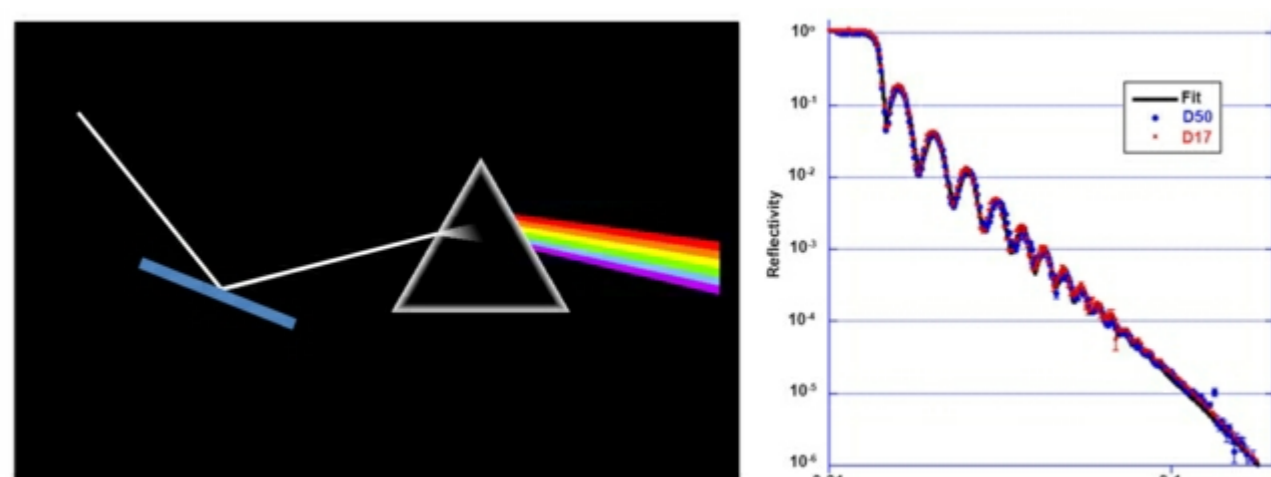
An ILL study on graphene-based materials - which are used as a model of interstellar carbon dust - sheds light on how molecular hydrogen forms at low temperatures in interstellar clouds - a key problem in astro-chemistry research. [Read more.](#)



Combining neutron scattering with fluorescence spectroscopy, in a collaboration with the Structural Biology Institute (IBS), to monitor the PAN unfoldase from deep-sea organisms and a Green Fluorescent Protein model substrate. This methodological approach is expected to be applied to a wide range of biological macromolecular complexes. [Read more.](#)

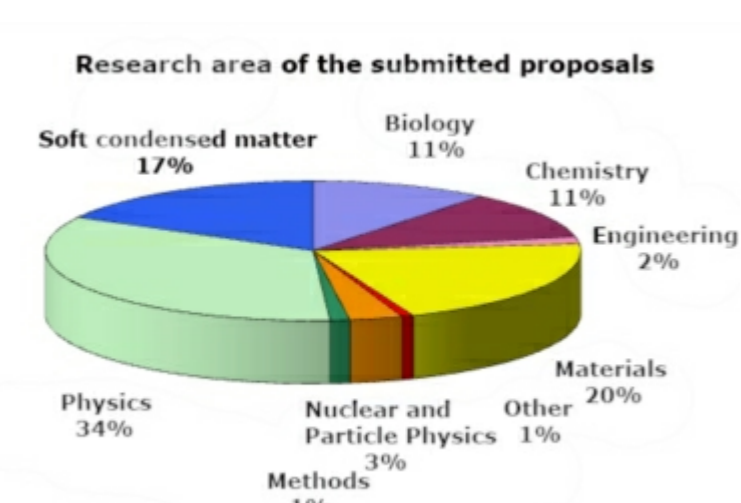
## A bright future for Rainbows

After eleven years since the idea was first published and three cycles of commissioning on D50 we can finally say that the idea of using a prism to measure the wavelength on a reflectometer, giving significantly higher count rates, now works. The technique, known as RAINBOWS, will initially be available to industrial users on D50. Further developments are required to implement RAINBOWS on the ILL public instruments, D17 and FIGARO. Many thanks to all those who helped us with the project.



## NEWS

## Beamtime access



Overall, 592 proposals were submitted to the ILL at the last round for a total request of 3905 beam days. The proposals will be evaluated by the ILL subcommittees on 4 and 5 April. Accepted proposals will be scheduled during the remaining two cycles in 2017.

Next deadline is 14 September 2017 (scheduling in 2018).

In the mean time, do not hesitate to use [quicker access mechanisms](#) (EASY, DDT, ...) : <https://www.ill.eu/users/applying-for-beamtime/>

## Transfer of large data sets to your home lab



[here](#)

A new service is available to ILL users, who would like to download large volume of experimental data. Until now this was only possible via solutions based on the http protocol (data.ill.eu or explorer.ill.eu) not ideal for transferring large data volumes. More information is available at [here](#).

## New PhD positions



12 PhD projects were selected in February 2017 for full or partial financial support by the ILL, and are looking for a suitable candidate. Please contact the main supervisor if you are interested in the project. The list of open positions is available [here](#).