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## VACANCY

The Institut Laue-Langevin (ILL), situated in Grenoble, France, is Europe's leading research facility for fundamental research using neutrons. The ILL operates the brightest neutron source in the world, reliably delivering intense neutron beams to 40 unique scientific instruments. Every year, the Institute hosts over 2000 visits by scientists, who come to carry out world-class research in condensed matter physics, crystallography, soft matter, biology, chemistry and fundamental physics. Funded primarily by its three founder members: France, Germany and the United Kingdom, the ILL has also signed scientific collaboration agreements with 11 other countries. The Science Division currently has a vacancy for a:

### Research Scientist: Ultra Cold Neutrons

#### Duties:

Working within the **Nuclear and Particle Physics (NPP) Group**, you will be involved in bringing into operation and optimising the new Ultra Cold Neutron (UCN) source SuperSUN. When commissioning is completed, you will take on the duties of 'Instrument Responsible' for SuperSUN.

You will support the experimental programme pursued by users. In the coming years the PanEDM experiment, aiming at measuring the neutrons electric dipole moment, will be the flagship experiment using this source.

In addition, you will contribute to studying possibilities to further enhance the output of this high-density UCN source and build towards a user programme for a superthermal liquid helium UCN source.

Besides these activities linked directly to the instrument you are expected to pursue your own active research programme and establish scientific collaborations. Resources available in support of this activity include the PF2 high-flux UCN source, the superthermal UCN source prototype SUN2 and the cold neutron facility PF1b.

#### Qualifications and experience:

We are seeking applications from highly motivated candidates with strong organisational skills and a PhD, preferably in experimental nuclear or particle physics. Experience and a strong interest in the development of instrumentation is a prerequisite. A firm knowledge of low-energy particle physics and neutron optics would be an advantage. Applicants with experience in other fields, such as cryogenics or surface science, are also encouraged to apply. The post represents an excellent opportunity for postdoctoral scientists to develop expertise, broaden their experience and interact with leading scientists from around the world. Applications from more experienced scientists on secondment from their home institution will also be considered.

#### Language skills:

As an international research centre, we are particularly keen to ensure that we also attract applicants from outside France. You must have a sound knowledge of English and be willing to learn French (a language course will be paid for by the ILL). Knowledge of German would be an advantage.

#### Notes:

This post is a 5-year fixed-term contract.

**Medical fitness for work under ionising radiation is required.**

**Post based in Grenoble and subject to administrative screening.**

Further information can be obtained by contacting the Head of the Nuclear & Particle Physics Group:

**Dr. Michael JENTSCH**, tel.: +33(0)4.76.20.70.52, email: [jentsch@ill.eu](mailto:jentsch@ill.eu).

*(please do not send your application to this address)*

#### Benefits:

Generous company benefits (expatriation allowance), relocation assistance and language courses may be offered (for more information, please consult our [employment conditions](#)).

#### How to apply:

Please submit your application online with a list of publications and the **names of 3 referees, including one from your present work place**, no later than **21.02.2021**, via our website:

[www.ill.eu/careers](http://www.ill.eu/careers) (vacancy reference: **21/04**).

*We are committed to equal opportunity and diversity; we therefore encourage anyone with relevant qualifications to apply.*