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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. The Institute welcomes 1700 visiting scientists per year to carry out world-class research in solid-state 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 10 other European countries. The Science Division is currently seeking to fill:

### **Post-Doctoral position in Crystallographic Computing (m/f)**

#### **Duties:**

Under the direct supervision of the Head of the Diffraction Group, you will work closely with the members of the Diffraction and Computing for Science groups, supporting and developing programmes used for diffraction data reduction and analysis. Your duties will include:

- the maintenance, documentation and development of the ILL crystallographic libraries and programmes (in particular the Fortran 95 CrysFML library).
- the development of integration algorithms and methods for single crystal data collected by 2D detectors, including Laue patterns, and the development of distributable stand-alone applications with the corresponding multiplatform graphic user interface (Windows, Linux and MacOS).
- the interfacing of Fortran and/or C libraries with scripting languages such as IDL and Python.
- participation in collaborative software development with other neutron centres.

#### **Qualifications and experience:**

We are looking for a highly motivated candidate with a keen interest in developing the use of computing resources to analyse and understand neutron diffraction data. You should have experience in scientific computing, a PhD in condensed matter science, and, preferably, some experience in neutron scattering. You must have a good knowledge of Fortran and/or C/C++ languages. Preference will be given to candidates with experience in single crystal diffraction.

#### **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 is a fixed-term **18-month contract**, which may be renewable for a similar period. For further information, contact Dr Juan Rodriguez-Carvajal, Head of the Diffraction Group ([jrc@ill.eu](mailto:jrc@ill.eu)).

#### **Benefits:**

Generous company benefits (expatriation allowance), relocation assistance and language courses may be offered.

#### **How to apply:**

Please submit your application online, with a list of publications and the names of two academic referees, no later than **30.06.2009**, via our website: <http://www.ill.fr/careers> (Vacancy reference: **09/19**)

*In line with our policy of Equal Opportunities, we encourage both men and women with relevant qualifications to apply.*