

Vacancy

Research Software Engineer –HPC & Simulation Platforms

The Institut Laue-Langevin (ILL), situated in Grenoble, France, is Europe's leading research facility for scientific research using neutrons. Every year, we host over 2000 visits by scientists, who come to the Institute to carry out world-class research. The Scientific Computing group (CS) at the ILL develops and maintains software tools for data reduction, analysis, and atomistic simulations. These activities are consolidated within a numerical platform, integrating Classical Molecular Dynamics and first-principles packages (Ab-initio, DFT) on a high-performance computing (HPC) cluster. As part of the ILL's Science Strategy, the CS group is leading the development of a new numerical platform IPAD (Integrated Platform for Analysing Data), a unified environment designed to streamline atomistic simulations for ILL users and scientists. IPAD will provide template workflows for routine simulations, handling technical complexities (input/output management, job submission, HPC monitoring). Simulations will further integrate into digital twins of ILL instruments, enabling high-quality dataset generation and opening the door to AI-assisted neutron data analysis. The CS group currently comprises eight scientists: four full-time developers and four researchers in direct contact with the Instrument Responsible. In response to growing demand for specialised numerical tools, the CS group is now expanding its team.

Your Tasks

- Support the development of the IPAD platform, bringing a good understanding of scientists' needs and the various aspects of atomistic simulations
- Contribute to the development of the Hylleraas Software Platform and its local deployment on ILL's IT architecture, ensuring its integration with the digital twin project (SCI – Instrument Control) and coordinating interactions between the IT and SCI groups
- Engage with scientists to assess their needs for AI-assisted on-the-fly data analysis

Qualifications / Experience

- Support the development of the IPAD platform, bringing a good understanding of scientists' needs and the various aspects of atomistic simulations
- Contribute to the development of the Hylleraas Software Platform and its local deployment on ILL's IT architecture, ensuring its integration with the digital twin project (SCI – Instrument Control) and coordinating interactions between the IT and SCI groups
- Engage with scientists to assess their needs for AI-assisted on-the-fly data analysis

We offer:

- ✓ **Quality of life** A hub for research and technology, the city of Grenoble is ideally located in the heart of the French Alps (just 3 hours from Paris/Provence by train, 1 hour from Lyon international airport and 1 ½ hours from Geneva). It is important for us that our staff achieve a healthy work-life balance. We therefore offer home working (under certain conditions), generous annual paid leave entitlement and a host of other benefits that you will discover when you arrive!
- ✓ **Prospects** We guarantee you a **36-month fixed-term contract** in a multicultural scientific environment.

Benefits - We offer generous social benefits (expatriation allowance, excellent health cover), moving and relocation assistance (under certain conditions) and an annual productivity bonus. We also offer language courses for you and your partner and subsidies for the use of public transport and the staff canteen, as well as for holidays and a variety of cultural and sports activities. For more details, visit <https://www.ill.eu/careers/working-at-the-ill/employment-conditions>

How to apply:

www.ill.eu/careers

Then why not take your next career step with us by applying online - preferably in English - via our career portal by **21.06.2026, quoting reference 26/25**. Please note that all applicants are subject to administrative screening (background checks). For this post, medical fitness, including for work under ionizing radiation is required. We are committed to equal opportunities and diversity and therefore welcome applications from all suitably qualified candidates.

Con copia de la candidatura a: eures.franciasuizabeneLux@sepe.es

Indicando la referencia ILL **26/25**

Ayudas a la movilidad EURES

