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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 8 other European countries.

The Science Division currently has a vacancy in its "**Computing for Science**" group for a:

### SCIENTIST (M/F)

The successful candidate will work closely with other "Computing for Science" group members, ILL scientists and users supporting and developing several of the group's activities. These include:

- Data analysis - the group develops data visualisation and analysis programs for a wide range of neutron scattering experiments. A number of languages are used ranging from Fortran and C to IDL (see [http://www.ill.fr/data\\_treat/lamp/front.html](http://www.ill.fr/data_treat/lamp/front.html)) and Matlab (see <http://www.ill.fr/tas/matlab/doc/>).
- Instrument simulations - new instruments and instrument upgrades, which can involve complex neutron optics, require Monte Carlo ray-tracing simulations for design optimisation. In particular, the widely used McStas code is jointly developed at ILL and Risoe (see <http://www.ill.fr/tas/mcstas/>).
- Sample simulations - in complex systems, understanding experimental data such as the vibrational density of states of materials or the static structure factor of liquids and glasses can be greatly enhanced by the use of total energy calculations, for example, based on density functional theory (see <http://www.ill.fr/Computing/club.html>).
- High performance computing - most of the group's activities require substantial computational resources. We operate two Linux clusters and have begun to set up a computational grid at ILL.

The ideal candidate will be highly motivated and have a keen interest in developing the use of computing in analysing and understanding experimental data. He/she should have experience in scientific computing, a PhD in condensed matter science and preferably some experience in neutron scattering. He/she must be able to contribute to the data analysis work and at least one other group activity.

Knowledge of English essential, knowledge of French and/or German would be an advantage.

This is a permanent position. In addition to a competitive salary, certain benefits (partial reimbursement of removal expenses, adaptation allowance, etc.) may be offered.

For further information, contact Dr Mark Johnson ([johnson@ill.fr](mailto:johnson@ill.fr)).

An application with curriculum vitae and the names of two academic referees should be sent, quoting reference 06/25, no later than 09.06.2006, preferably by e-mail to: [johnson@ill.fr](mailto:johnson@ill.fr) or by post to

**Dr M. Johnson, Head of Computing for Science Group**  
**INSTITUT LAUE-LANGEVIN**  
**B.P. 156 - 38042 GRENOBLE CEDEX 9 - France**

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