Vacancy for a permanent scientist to work on the ABINIT software platform

Start date: 1 October 2021

Job description:

A full-time logistician position in the field of ab initio modelling of material properties (ABINIT software platform - https://www.abinit.org/), attached to the CESAM research unit.

Activities:

- Coordination, development and maintenance within the ABINIT software platform, in particular of the MULTIBINIT and AGATE software, as part of the ABI-Logix inter-university consortium - Planning and optimising the strategy concerning the physical properties to be implemented, participating in their implementation, ensuring the monitoring and correct merging of the contributions of the different developers, producing and distributing the different code releases, benchmarking.

- Database management - In particular, development and maintenance of a database of effective material potentials for MULTIBINIT.

  - Management of local hardware resources and access to decentralised resources - Management of the local stock of computers dedicated to the ABINIT platform (access, backups, updates, investments); help with the submission of collective applications on supercomputers, also as part of the ABI-Logix consortium.

- Support for ABINIT platform developers - Specific support for ULiège developers but also broader support to the entire Belgian and international community through the activities of the ABI-Logix consortium.

- Support for users of the ABINIT platform - Specific support for ULiège users (Masters’ students, PhD students, post-docs, visitors, etc.) as well as more broadly to the entire Belgian and international community through the activities of the ABI-Logix consortium (e.g., the user forum, development of online tutorials, training of researchers in international schools).

- Quality control - Regularly developing the Test Farm testing capability with adequate automatic testing when adding new features, in order to validate the above developments and protect them from deterioration in any new implementations, in consultation with the ABI-Logix consortium.

Qualifications required / profile:

- Must hold a PhD in Science or Applied Science in the field of Materials Physics.
- Research profile in the field of ab initio modelling of material properties.
- In-depth computer knowledge (in Fortran, C/C++, Python). Mastery of parallel programming and/or programming on graphic cards is an advantage.
- Previous expertise in the development and maintenance of large-scale ab initio simulation software.
• International experience (research stay abroad or equivalent experience).
• Proficiency in English and French (before the final appointment is made).
• Good interpersonal qualities and teaching skills.

Selection procedure:

The selection procedure will be in accordance with the regulations applied within the University of Liège.

Applications:

Applicants are requested to submit their applications electronically, to the following address: Postesscientifiques@uliege.be and doyen.sciences@uliege.be with a copy to francoise.motte@uliege.be no later than 6 April 2021.

How to apply - required documents:

✔ Applications should be accompanied by a complete curriculum vitae;
✔ A report on past and ongoing research and software development and maintenance activities;
✔ A plan describing the personal vision of the long-term development and management of the software of the ABINIT platform to be coordinated (in particular MULTIBINIT and AGATE);
✔ A copy of publications (in electronic form) as well as the link to any software developed and available online.

Conditions of recruitment:

Positions are awarded either on a permanent basis from the outset or following a positive evaluation at the end of a term of office or a fixed-term contract of up to four years.

Our institutional policy is based on diversity and equal opportunities. We select candidates on the basis of their qualities regardless of age, sexual orientation, origin, beliefs, disability or nationality.

Conditions for permanent appointment:

If the successful candidate is well known to the Institution and has demonstrated their scientific and logistical skills, the Committee may, if it so wishes and with the necessary explanation, judge the appropriateness of, from the outset, offering the successful applicant the post as research logistician on a permanent basis.

Information:

Further information can be obtained from Ms Françoise Motte-Tollet, Administrative Directorate of the Faculty of Sciences – tel. +32 4 366 36 52 - francoise.motte@uliege.be

Salary:

Salary scales and how they are applied are available from the human resources department of the University: Ms Ludivine Depas – tel.: +32 4 366 52 04 – Ludivine.Depas@uliege.be