Scientific Software Developer Vacancy

Vacancy

The Institute of Astronomy (IvS) at the KU Leuven is looking for a new highly-motivated colleague to join their space instrumentation team, for the following two projects:

- The team developed state-of-the-art simulator software in C++ for space-based time-resolved CCD photometry, which was and still is an important aid in designing the Plato satellite and its on-board data processing software. The successful applicant will extend the capabilities of this simulator, improve its efficiency, upgrade its build system, and apply the resulting code to both Plato and new satellite projects.
- The IvS is currently actively involved in the assessment of a candidate satellite designed to study exo-planet atmospheres. The successful applicant will analyze the effect of stellar variability on absorption spectra measured by the satellite and assess the impact on the project's scientific objectives. This task will involve developing and deploying a dedicated software tool to simulate the expected scientific data.

Host

The Katholieke Universiteit Leuven (KU Leuven) was founded in 1425, and is the oldest and largest university of Belgium. It offers approximately 60 Bachelor's programs and more than 125 Master's programs. On 1 Nov 2011, more than 40,000 students were enrolled at KU Leuven, of which about 85% are Belgian nationals. The university strongly invests in high-quality research in an international environment, and employs approximately 1,500 professors, 850 postdoctoral researchers and 4,000 doctoral students, with a research expenditure of about 297 Million euro (2008). In 2009, the KU Leuven ranked 65th in the QS World University Rankings.

The Instituut voor Sterrenkunde (IvS) is a young and active research group of some 45 scientists, engineers, and administrative staff. Its publication output in 2009 consisted of more than 90 peer-reviewed scientific articles. The institute's key areas of expertise are asteroseismology, (circum)stellar infrared astronomy, and ground-based as well as space-based astronomical instrumentation. The institute is active in the space missions Herschel, CoRoT, and Kepler. In addition, the IvS operates its own 1.2m Mercator telescope at La Palma.

Profile

The candidates (m/f) are expected:

- to have obtained a master degree in astronomy, physics, or engineering.
- to have an excellent knowledge of the English language
- to be familiar with C++ or Java. Knowledge of Python is a bonus.

Contract

The contract runs over a period of 1 year, with possible extension. The salary depends on the seniority of the candidate. The starting date is as early as possible after joint consultation.

Application procedure

- Candidates should apply through the KU Leuven vacancies web interface where they are required to upload a motivation letter, a curriculum vitae, possible previous research experience, a study curriculum with rankings, a proof of english proficiency (for foreign applicants), and names and e-mail addresses of 2 reference persons (academic or former employers).
- The application deadline is 1 February 2012. Candidates will be informed in due time whether they will be invited for an interview in February 2012. A final decision will be made no later than 1 March 2012.
- The IvS is committed to equal opportunity employment, with no discrimination based on nationality, gender, religion, age, or race.

Contact Information

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