



JOB OFFER

BIRA-IASB is looking for:

Scientist (M/F)

Deadline for applications: 1 June 2020
The contract start date shall be as soon as possible.

Division, context:

The Belgian Institute for Space Aeronomy (IASB-BIRA) is a scientific institution of the Belgian Federal Space Pole located in Uccle (Brussels). Its principal mission is to develop scientific and technological expertise in the field of aeronomy.

One of the research domains of our division "Solar Radiation in Atmospheres" (D40) is to assess the atmospheric composition and the experimental/theoretical methods related to its remote sensing. In that frame, the "Limb remote sounding" group (D41) has proposed the ALTIUS mission, which will be the first Belgian atmospheric satellite. In 2016, ALTIUS has been selected by ESA as an EarthWatch mission (more info from a recent ALTIUS symposium: see <https://events.oma.be/indico/event/20/overview>), financially supported by BELSPO, with an expected launch around 2023/2024 and a 3 to 5-year mission lifetime. In parallel, that group is also acting as prime for the PICASSO CubeSat mission (to be launched in 2020), which aims at demonstrating the use of a nanosatellite for atmospheric remote sounding by solar occultations and for in-situ plasma characterization.

The successful candidate will join the ALTIUS team (about 10 people) within the Solar Radiation Department to take part in the scientific development related to the data processing of atmospheric space missions.

Responsibilities

- Contribute to the development of retrieval algorithms in limb geometry (limb-scattered solar light; stellar, solar, lunar occultations; air glow).
- Develop and operate numerical tools for the assessment of the mission performance.
- Participate in writing the technical documentation of the project.
- Attend technical meetings with ESA and industrial partners.
- Support the preparation of technical offers in response to ESA invitations to tender.

More about BIRA-IASB

The Royal Belgian Institute for Space Aeronomy (BIRA-IASB) is a Belgian Federal Scientific Institute. Since its founding in 1964, BIRA-IASB has been conducting research and providing public services in space aeronomy, i.e. the physics and chemistry of Earth's atmosphere and other planets, and outer space.

Our scientists use instruments on the ground, in the air, on board balloons or in space and computer models.

www.aeronomie.be

Required competences

- Possesses a master's degree in mathematics, physics, engineering, or similar disciplines.
- Possesses scientific experience in the field of inverse problems.
- Feels comfortable working in a Linux environment.
- Is able to produce technical documentation in English.

Technical skills

The following elements are not mandatory, but are considered as assets:

- Knowledge of the advanced features of MATLAB.
- Knowledge of Python and CUDA.
- Experience with version control systems, including branching.
- Experience in numerical methods.
- Interest in Web technologies and tools (CMS, Wiki, Continuous integration server, issue tracker...)

Generic skills

- Fluent in written and spoken English.
- Knowledge of French and/or Dutch is a plus.
- Team-oriented.
- Capacity to interact with partners in a multi-lingual environment.

We offer

- The position is on a contractual basis. Salary is according to the federal regulations for scientific contractual personnel. Relevant scientific seniority will be taken into account.
- Dynamic working environment with international contacts.
- Interesting holidays regulations, multiple ways to balance professional and private lives (flexible schedule within the 38 hours week, possibility to work from home, possibility to work 80%).
- Possibility to acquire a bonus for bilinguism (Dutch/French).
- Full refund of commuting expenses when using public transportation, compensation when using the bicycle.
- Access to special advantages arranged for the employees of the federal scientific institutions (such as: collective hospital insurance, possibility to follow training, partial compensation of sports / culture subscriptions, Fed+ card with access to many advantages, ...).
- Pleasant work environment in a scientific institution located in a green setting in Uccle, Brussels.
- Company restaurant with reasonably priced hot meals and salad bar.
- On-site childcare during school holidays in July and August.

For technical information about this vacancy, please contact Dr. Didier Fussen by email (didier.fussen@aeronomie.be).



Interested?

Send your CV and motivation letter to:

altius-mgmt@aeronomie.be with hr-ae@aeronomie.be in copy

with the following reference: "D41_Scientist"