JOB OFFER

THE ROYAL OBSERVATORY OF BELGIUM SEEKS A SCIENTIFIC COLLABORATOR SILSO-USET

This position is fully integrated within the Uccle solar observing station (Uccle Solar Equatorial Table, http://sidc.be/uset) which is closely related to the World Data Centre - SILSO (Sunspot Index and Long-term Solar Observations, http://sidc.be/silso) at the Royal Observatory of Belgium. Activities include acquisition, distribution and exploitation of full solar disk images in white light (photosphere), and in two chromospheric channels (Hα, Calcium II) as well as the production and exploitation of sunspot drawings and the associated sunspot region catalogue. These activities are funded by the internal budget of the Royal Observatory of Belgium, the STCE (Solar Terrestrial Center of Excellence) and from 2017 onwards by the federal BRAIN.be ValUSun project.

Your main activities will be:

- Development of pre-processing software for USET solar images (photometric corrections, coordinates re-mapping, meta-data extraction).
- Development of advanced products (automatic detection of events, synoptic maps, animated sequences of images, standardized bulletin texts for prediction centers).
- Treatment of the data extracted from the sunspot drawings (quality control, statistics). This task could include the improvement of the DigiSun software developed at ROB and its implementation in other Institutes worldwide.
- Possible involvement in the automation the USET telescopes.

Depending on the candidate's profile, the above-mentioned activities could include scientific research leading to publications centered on the long-term evolution of the Sun and solar cycle properties, in collaboration with the SILSO team. Considering the small size of the SILSO-USET team, and the large diversity of activities, the candidate could also participate in operational daily observations with the USET telescopes, occasionally on week-ends.

WE SEARCH FOR

- Master or PhD in Physics, Mathematics or Computation, or Engineering degree with corresponding orientation.
- Working proficiency in English.
- Experience in programming is necessary. Practical knowledge of UNIX, databases (SQL), Python and MS C# would be a plus.
- A background in image treatment and/or advanced statistical analysis (data mining) would be greatly appreciated for this position.
- previous experience in astrophysics or adjacent discipline would also be a plus.

HOW TO APPLY?

A complete application includes a motivation letter and a full CV in PDF format (with details of previous work and study career). Please send your application to frederic.clette@oma.be before April 15 2017.

WE OFFER

The ROB (http://www.observatory.be/) is a Belgian federal institute in the green outskirts of Brussels (Uccle).
The ROB solar Physics team (http://sidc.be) is involved in numerous ground-based and space-based projects, as well as several operational services of monitoring and predicting solar activity on the European and international level. The team counts approximately 40 collaborators, mostly scientists from more than eight different nationalities (http://sidc.be).

Newly appointed employees start with a contract of 1 year that, following mutual satisfaction, can be extended with another year and ultimately with a contract of undetermined duration. The present function is available immediately and will be scaled at salary level SW1. The working conditions include a flexible system of working hours and teleworking.