JOB OFFERS

The Royal Observatory of Belgium is looking for a postdoctoral researcher in frame of the EU Horizon 2020 PIONEERS (Planetary Instruments based on Optical technologies for an iNnovative European Exploration Using Rotational Seismology) project.

Thanks to the funding from European Commission, a scientific position at doctoral or postdoctoral level is available. The person to be hired will work on the EU Horizon 2020 PIONEERS project. Rotation and surface gravity are a key parameter to understand the internal structure of planetary objects and targets the fundamental science objectives from the formation of planetary systems to the characterization of habitable worlds. The PIONEERS project aims at developing a new instrument for the exploration of the Solar System and in particular of the Near Earth Objects (NEO). The instrument will target to measure ground acceleration, deformations and rotations of small bodies, i.e asteroids, NEO, comets and moons. Accommodation on a small platform compatible with CubeSat standards will also be considered. Based on a multitude of mission scenarios, the candidate will work essentially on the modeling of the surface accelerations and rotations in order to determine the instrument operating range requirements that will impact the sensor design and on demonstrating and testing the science potential for planetary exploration for each case. This involves modeling of gravity and rotational dynamics of sample objects (planets, asteroids, moons) and lander/surface interactions. He/She will work also on the data analysis methods and finally on field testing of the instruments. The candidate is expected to work also on dissemination and communication of the project results to non-experts as well as to scientific and industrial community.

The candidate shall also contribute to peer reviewed publications and scientific reports. The ROB (http://www.observatory.be/) is a Belgian federal institute in the green outskirts of Brussels (Uclee). The initial contract is for a duration of 12 months (salary level SW1). Advantages include a flexible system of working hours.

WE ARE LOOKING FOR

The ideal candidate has a master or Ph.D in Science or Engineering and combines many of the following characteristics:

- Good knowledge basic physics,
- Good knowledge of numerical modelling
- Experience in geophysics of Small Bodies of the solar system (Asteroids, NEO ...),
- Working and writing proficiency in English.
- Any additional experience on space instruments related to landers and CubeSats will be an advantage.
- Experience in conducting experimental testing setups and data analysis are considered an asset.

HOW TO APPLY

A complete application includes a motivation letter, a full CV in PDF format and names/coordinates of two referees. Please send your application to ozgur.karatekin@oma.be before 20 September 2020. The position is available from November 1st, 2020.