

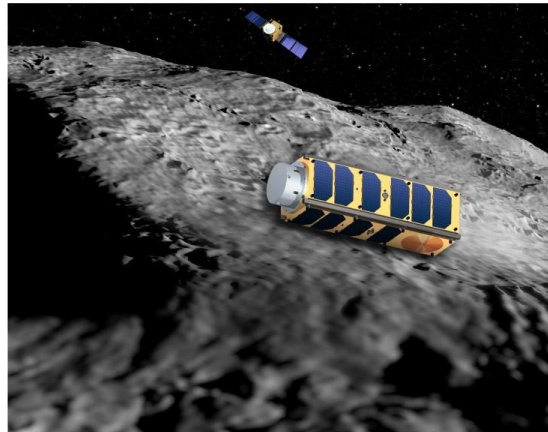
# JOB OFFER

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 postdoctoral level is available. The person to be hired will work on the EU Horizon 2020 PIONEERS project. Planetary seismology is a key technique to image the internal structure of planetary objects and targets fundamental science objectives from the formation of planetary systems to the characterization of habitable worlds. The PIONEERS project aims to develop a new six degrees of freedom (DoF) ground motion instrument for the exploration of the Solar System. The instrument will target to measure ground deformations and rotations of terrestrial planetary objects and also to explore small bodies. 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 determination of 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 rotational dynamics of sample objects (planets, asteroids, moons). He/She will work also on the data analysis methods and finally on field testing of sensor combinations (3DoF vs. 6DoF). 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.



## **WE ARE LOOKING FOR**

The ideal candidate has a PhD in Science or Engineering and combines many of the following characteristics:

- Experience in the development of planetary instrumentation,
- 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.

## **WE OFFER**

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 (Uccle). The contract is for a duration of 12 months post-doc (salary level SW11).

## **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](mailto:ozgur.karatekin@oma.be) before 15 February 2019. The beginning of employment will be on April 1st, 2019 or later.