



# JOB OFFER

**The Royal Observatory of Belgium (ROB) is looking for scientists in the frame of research projects devoted to the validation of heliospheric simulations (EUHFORIA) on the basis of observations from recently launched space missions.**

Thanks to the funding from the Belgian Federal Science Policy Office (BELSPO) and from the Horizon 2020 programme of the European Union, two scientific positions have become available in the BRAIN-be project SWiM (Solar wind modeling with EUHFORIA for new heliophysics space mission), and in the H2020 project EUHFORIA 2.0.

The aim of these projects is to validate and improve modeling of solar wind and its transients with the simulation code EUHFORIA, employing in particular in situ observations from the new heliospheric missions Parker Solar Probe and Solar Orbiter. These two projects build on the results obtained in the framework of ongoing networking BRAIN-be project CCSOM (Constraining CMEs and Shocks by Observations and Modelling throughout the inner heliosphere) lead by the ROB scientists. Studying dynamics of the ambient plasma characteristics will help us to improve our understanding on the formation and evolution of solar wind and its transients, such as CMEs – Coronal Mass Ejections. This will result in better defined inputs to EUHFORIA, and accordingly improved forecasting capabilities of EUHFORIA. These results will be validated using corresponding metrics and statistical methods.

The candidate will contribute to the development of mentioned research topics in collaboration with other ROB scientists. The candidate will also assist in the writing of peer reviewed publications and scientific reports.

The ROB (<http://www.observatory.be/>) is a Federal Scientific Institute in the outskirts of Brussels (Uccle). The initial contract is for one year with a possibility for extension depending upon the available funding (salary level SW1 of the scientific personnel). Advantages include a flexible system of working hours.

## WE ARE LOOKING FOR

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

- Knowledge in solar physics, in particular on solar wind and CMEs
- Experience in working with in situ observations and specifically with Parker Solar Probe and Solar Orbiter observations
- Experience on the application of validation metrics and statistical methods
- Experience in working with Python
- Speaking and writing proficiency in English.

## HOW TO APPLY

Send your CV with a motivation letter and names and coordinates of two referees before 15 February 2021 to Jasmina Magdalenic and Luciano Rodriguez, project responsible ([jasmina.magdalenic@oma.be](mailto:jasmina.magdalenic@oma.be) & [luciano.rodriguez@observatory.be](mailto:luciano.rodriguez@observatory.be)). The beginning of the employment will be on 1 April 2021 or later.