



**CHINA-BRAZIL**

**JOINT LABORATORY FOR SPACE WEATHER**

**Postdoctoral Research Fellowship Program  
(2021)**

**Office of Joint Laboratory**

**January 13, 2021**

The China-Brazil Joint Laboratory for Space Weather (Hereinafter referred to as CBJLSW)/ National Space Science Center (NSSC)/ Chinese Academy of Sciences (CAS), invites the applicant for postdoctoral research fellowship in the field of Space Science and Space Weather Studies.

## 1. OBJECTIVES

The CBJLSW postdoctoral research fellowship program aims to train excellent, outstanding and potential scientists to contribute research and development of the space weather and space science for China and Brazil.

To achieve the scientific goal of CBJLSW, the postdoctoral fellows should work with the following research aims: monitoring and research of the solar atmosphere, interplanetary space, magnetosphere, ionosphere, middle and upper atmosphere, and lower atmosphere, by obtaining space environmental monitoring data in the western hemisphere in order to understand the regionality of space weather and of its relationship with global change and by performing research on several aspects of Solar-Terrestrial physics and space weather. The two parties train young researchers, conduct scientific research and take responsibility for the operation and maintenance of equipment after they approve a selection process by the academic committee of CBJLSW.

## 2. CHARACTERISTICS

The 2021 postdoctoral research fellowship program of CBJLSW will start on **March 1<sup>st</sup>, 2021** and last for two years, with a maximum of eight postdoctoral fellowship positions.

### 2.1 Research areas:

- a) Solar surface and interplanetary processes associated with space weather.
- b) Dynamics and modeling of Solar Wind-Magnetosphere interactions.
- c) Dynamics of the magnetosphere and space weather effects.
- d) Dynamics of the Radiation Belts and of the South Atlantic Magnetic Anomaly.
- e) Dynamics of the ionosphere at low and equatorial latitudes during intensified Space Weather.
- f) Ionospheric processes in the South Atlantic Magnetic Anomaly region.

- g) Dynamics of atmospheric metal layer based on Lidar detection.
- h) Photochemistry and dynamics of the mesosphere and low thermosphere over Brazil.

## 2.2 Requirements and Commitments

The applicant:

- a) Have completed the PhD.
- b) Assume exclusive dedication to the research project.
- c) Have a solid background in space physics, scientific research experience in his/her proposed fellowship research project and have good communication and group cooperation capabilities.
- d) Cannot have an employment relationship, nor can receive, during the entire period of the fellowship, another entity's fellowship, salary or remuneration resulting from the exercise of activities of any nature.
- e) Cannot make changes to the initial plan of the research project without a prior consent from CBJLSW.
- f) Submit scientific reports within the scheduled deadlines, accompanied by the requested documentation.
- g) Refer to CBJLSW / NSSC / CAS's support in articles, books, abstracts of works presented at meetings and in any other publication or form of dissemination of activities which will result, in whole or in part, from grants supported by the CBJLSW.
- h) Must ensure the adequate protection of intellectual property rights that may result from a project supported by CBJLSW.

## 3. CONDITIONS

3.1 The postdoctoral research fellowship includes:

- a) Monthly payment: R\$ 7500.00 (seven thousand five hundred real).
- b) Performance bonus: R\$ 15000.00 (fifteen thousand real).

This bonus will be given when the fellow meets the requirements for article publication and passes the mid-term evaluation as well as the final assessment (one-time extra allowance).

- c) Maternity/ paternity leave (Federal Law of Brazil No. 13,536, of December 15<sup>th</sup>, 2017).

### 3.2 Fellowships duration

- a) The CBJLSW postdoctoral research fellowship can last for a period up to 24 months.
- b) There is the possibility for an application of a second contract (with a duration also up to 24 months).

### 3.3 Restrictions

- a) The postdoctoral fellow who does not deliver the final scientific report will not be allowed to apply for a new contract in the program.
- b) A postdoctoral fellow will not be allowed to have a supervisor who is closely related to him/her.
- c) The cost of traveling abroad will not be covered by CBJLSW, except for a working report meeting or a scientific conference in China, directly related with the postdoctoral fellow's research project and when approved by the CBJLSW.

3.4 Although the above described regulations for this fellowship program will try to be followed, it is important to note that some of the rules may eventually become modified by the CBJLSW staff due to unexpected economic, political or sanitary changes that may occur. Such modifications may involve changing the validity of the start and end dates of the fellowship, reducing the number or the amount of fellowships, and may require other appropriate measures to be applied for each situation. The laboratory will have the right to make this amendment when necessary without separate notice.

## 4. Evaluation Criteria

The proposals will be judged by ad-hoc reviewers from NSSC and INPE based on the applicants' projects and CV.

Evaluation criteria:

- a) Perform scientific production as the first author in articles in indexed scientific journals of recognized quality in the area.
- b) Research project.
- c) National and international academic activity experience.
- d) Excellent performance in previous CBJLSW fellowships.

- e) Three recommendation letters from scientists who work in Space Science and know well the applicant's work.
- f) Other aspects considered relevant for the assessment of the applicant's potential as a researcher, such as group cooperation capabilities and academic and ethical conduct.

## 5. ASSESSEMENT

The mid-term evaluation will be performed after one year and the final assessment will be carried after two years. The important assessment criteria is to have annually at least **one paper in a JGR journal (or in a journal with a similar Impact Factor), or two scientific papers in journals with Impact factors not less than 1**. The second year of the fellowship will be allowed only if the fellow passes the mid-term evaluation, otherwise the postdoctoral position will be terminated.

The assessment items and proportion of scores is as follows

- a) Progress and completion of scientific research work 40%.
- b) Published Articles 30%.
- c) Academic exchange 15%.
- d) Participate in lab construction and operation 15%.

The fellow needs to have a total performance grade above a minimum score of **70** over 100 in order to be approved.

## 6. MATERIALS

- a) Complete CV in English version with a brief introduction of research experience.
- b) Detailed Research Proposal containing a maximum of 20 pages.
- c) Photocopies of all the title pages and abstracts of maximum 5 published academic papers.
- d) Recommendation Letters: You must ask from three scientists familiar with you and your work to send their recommendation letter on activities for the last 5 years directly to the email address at the end of this document (signed, dated and on official headed paper with contact phone number and email address).
- e) Notarized photocopy of the certificate of university degrees held (both undergraduate and postgraduate; graduates having just completed or about to complete their degree should provide an official pre-graduation certificate showing their student status and stating the

expected graduation date).

- f) Notarized photocopy of transcripts of both undergraduate and post-graduate education.
- g) Application form.

## **7. DEADLINE**

- For the applications: **January 31<sup>st</sup>, 2021** (Items a, b, c and d from MATERIALS).
- Result announcement: **February 20<sup>th</sup>, 2021**.
- Submit additional items listed in MATERIALS: **February 25<sup>th</sup>, 2021** (Items e, f and g).

## **8. CONTACT**

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Welcome to apply for the 2021 postdoctoral research fellowship program. If you have any additional questions, please feel free to contact us.

*Best regards,*

***China-Brazil Joint Laboratory for Space Weather***