

## **QUICK INFORMATION ABOUT THE CALL FOR A RESEARCH FELLOWSHIP**

### **Title**

Science with the SRT - Observational activities related to the multi-beam cryogenic receiver in W Band for the SRT

### **Project Duration**

1 year renewable up to 3 years in total (starting the contract by 15 November 2021; with the possibility of postponing the start date in Cagliari)

### **Site**

INAF - Osservatorio Astronomico di Cagliari, Italy

### **Budget**

28.000 Euro/year

### **Deadline**

20 August 2021

### **Website**

<http://www.oa-cagliari.inaf.it/competitions.php>

### **Contact point for information**

Please send an email to ***info\_applications.oaca@inaf.it*** if you need information or support for the application

**Please, be aware that to apply for the position, the application forms in Italian must be used. We provide the English version only for the sake of clarity.**

### **Research Fellowship Description**

The research fellow will assist in the observing activities related to the SRT multi-beam cryogenic receiver in W Band. About 50% of the working time will be focused on research centered on the study of astronomical objects through high frequency radio observations. The remaining 50% of the time will be dedicated to activities of Support Scientist, assisting in the scientific operations of the SRT. The research fellow will join the SRT operational team to ensure the functionality of the new receiver. Specifically, the fellow will participate in the scientific commissioning of the receiver, will contribute to the characterization of its pointing, focus, and gain curves, as well as to the definition of the calibration procedures with various observing strategies. Finally, the Support Scientist will collaborate with the Support Scientists assigned to other receivers of the SRT to characterize and optimize the functionality of the telescope at frequencies above 22 GHz.

### **Preferential Qualifications**

Preferential qualifications will be considered:

- scientific experience in radio-astronomical research;
- experience in planning and carrying out observations at high radio frequencies with single-

- dish telescopes (possibly in spectroscopic mode);
- knowledge of a programming language such as Python, C, C ++;
- ability / aptitude for teamwork in complex organizational systems.

### **Selection Criteria**

The selection board will evaluate the qualifications according to the criteria of relevance to the topic of the research fellowship. The assessable qualifications (see the rules indicated in the call of selection) are:

- Curriculum vitae et studiorum;
- Publications;
- Other scholarship contracts / research grants / research contracts;
- other relevant titles.

### **Project Recipients**

Participation in this selection is reserved for Italian or foreign citizens who meet the following minimum requirements:

- PhD in Physics or Astronomy or equivalent title, issued by a Higher Institute or University, including foreign;

or

- Bachelor's degree (old system) or specialist or master's degree (new system) in Physics or Astronomy or equivalent qualification, issued by a Higher Institute or University (including foreign) and subsequent documented experience of at least 3 years in scientific, technological or managerial activities.

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### **SOME PRACTICAL INFO ON BUREAUCRACY**

The candidates who will present Academic Qualifications obtained abroad that do not already have a statement of comparability ("equipollenza") to the degree obtained in Italy, will be evaluated by the selection committee which will be able to admit them with reserve to the selection, provided they attach to the application of participation the note proving the activation of the request for statement of comparability ("equipollenza") or the request (Annex C) for equivalence ("equivalenza").

In the **Annex C** ("equivalenza") of the application, the candidate must indicate the following documents that have been attached to the application or those for which the procedures to request them have been started (to indicate with a cross) :

- Valid ID (for EU and Italian applicants only) or passport;
- Certified copy of the foreign qualification in the original language and certified copy of the exam list in the original language / transcript of records / degree, / diploma supplement, with legalization or apostille from The Hague previously affixed to the originals;
- Certified copy of the foreign qualification translated;

- Certified copy of the translated exam list / transcript of records / degree;
- Certified copy of the declaration of value on the spot issued by the Italian diplomatic representations for qualifications obtained in non-EU countries, outside the European Economic Area (S.E.E.) and outside the Swiss Confederation;
- Certified copy of the translated diploma supplement or certified copy of the certificate of comparability of the Enic / Naric Italy center for qualifications obtained in countries belonging to the European Union or the European Economic Area, as well as the Swiss Confederation.
- Certified copy of the previous qualification only if obtained abroad or substitutive declaration of certification if the previous qualification was obtained in Italy.

**Note that instructions in foreign languages to obtain a Certified copy of a document can usually be found on the web page of the Italian Consulates/Embassies abroad.**

*Certified Copy means a photocopy of the original document authenticated by the Italian diplomatic representations in the foreign country of origin of the document. or, if the copy is made in Italy, authenticated pursuant to Article 18 of Presidential Decree 445 / 2000; for the declaration of value on the spot issued by the Italian diplomatic representations and for the sworn statement, with attached sworn translation of the documents, formed in Italy at a Court or a Justice of the Peace, it is possible to present, as an alternative to authentic copies pursuant to of art.18, declaration of certified copy by substitutive declaration of notary deed pursuant to art.19 and art.19 bis of Presidential Decree n.445 / 2000 as the documents come from public administrations; for the sworn report and attached translation, with clearly visible court stamps and / or declaration at the bottom that it is a copy, no authentication or declaration is required replacement as already authenticated copy).*

*For qualifications obtained in EU countries, it is possible to authenticate the documents with a competent public official pursuant to art. 18 and produce a substitutive declaration of a notary deed pursuant to Article 19 and Art. 19 bis.*

*For qualifications obtained from non-EU countries, it is possible to submit a substitutive declaration of a notary deed pursuant to art. 19 and art. 19 bis only for the declaration of value and the certification reports of the sworn translations with attached translation.*

*For copies of qualifications and transcripts of exams and translations performed abroad, the copy authentications in front of a public official are required pursuant to art. 18.*