

Title: "Pulsars and FRB studies with LOFAR data"
Location: INAF - Osservatorio Astronomico di Cagliari (Cagliari, Italy)
Application deadline: 31/01/2024 (before 23:59 local Italian time)
Referents: Caterina Tiburzi, Maura Pilia

1 postdoctoral (Assegno di Ricerca) positions for 1 year, renewable a second year.
Start date: preferably between April and June 2024
Net salary: approximately 2300-2400 euros/month

SCIENTIFIC PROGRAM

The LOw Frequency ARray (LOFAR) is a network of radio antennae to observe the lowest frequencies of the electromagnetic spectrum. LOFAR has a core in the Netherlands, and stations distributed in all Europe, with one arriving in Italy, in the radioastronomical facility of Medicina (BO).

The candidate will take care of planning and carrying out time-domain observations with LOFAR, both with the core and with the single stations (in particular with the Medicina one, if available). They will also carry out the analysis and interpretation of archival data (obtained with previous observing projects) and of new observations that will be collected in the context of the future LOFAR2.0, both in the field of pulsars and in the one of fast radio bursts.

PREREQUISITES

A PhD in physics, astronomy, astrophysics, engineering, informatics or mathematics (or an equivalent title released by a university outside Italy)

OR

A master's degree in physics, astronomy, astrophysics, engineering, informatics or mathematics, + 3 years of documented research experience in physics/astronomy at the time of the application deadline.

PREFERRED EXPERIENCE

- experience with low frequency radio astronomy
- observational experience with radio telescopes, in particular of the aperture array type
- intermediate/advanced programming knowledge (e.g. in Python)

INSTRUCTIONS

- 1) Application form: fill out Allegato/Annex A *in Italian*, date and sign.
- 2) Curriculum Vitae written in Italian or English, with "Curriculum Vitae et Studiorum" written on top; dated and signed at the end.
Include the following text at the end of the CV:
"Le informazioni contenute nel presente "Curriculum vitae et studiorum" sono rese sotto la personale responsabilità del sottoscritto, ai sensi degli articoli 46 e 47 del Decreto del Presidente della Repubblica 28 dicembre 2000, numero 445, e successive modifiche e integrazioni, consapevole della responsabilità penale prevista dall'articolo 76 del medesimo Decreto per le ipotesi di falsità in atti e/o dichiarazioni mendaci."
- 3) Fill out Allegato B with the list of all obtained "titles" (in practice, you list everything you have in your CV., e.g. obtained degrees, work experiences, presented talks, outreach etc.)
- 4) List of all publications, dated and signed, and including:

- Title of the publication, name of journal, year, list of authors, web address where we can find the article (make sure the articles are available in open access; if not, include your publications in your application as PDF attachments)
- 5) Research statement (~1 page), listing interests and research plans. Make sure to emphasize any experience you have in the aforementioned list of “preferred experience”.
 - 6) Scan of ID document (e.g. passport) — signed
 - 7) Copy of university degrees (e.g. bachelor’s, master’s and PhD degrees) for the degrees done outside of Italy (no need to attach a copy of Italian degrees)
 - 8) If the candidate has not finished their PhD, or has done their PhD outside of Italy, include a certificate/letter that documents at least 3 years of scientific research after your master’s degree

The application (points 1-8) should be sent via certified email (PEC) or ordinary email (the email address used to send the application must belong to the candidate) before the deadline (31 January 2024) to the address: inafoacagliari@pcert.postecert.it (send to this address ONLY and not include anyone else in CC)

No zipped files, attachments in PDF only, you can send several emails with the same title if needed with the subject: Domanda per Assegno Post Dottorato “Pulsars and FRB studies with LOFAR data” + first name + last name

- 9) 2 letters of recommendation sent directly by the letter writers (before the deadline) to: inafoacagliari@pcert.postecert.it

With the subject: "A/R LOFAR - Lettera di referenze"

The “Allegato C” refers to university degrees obtained abroad (outside Italy). These documents will need to be submitted before the candidate can be officially hired, but are not needed by the application deadline. This will be clarified later with the winners of the competition.

The submitted qualifications will be evaluated out of 60 points. The candidates who score a minimum of 42 points (out of 60) will be invited to participate in an interview (that will most likely be conducted remotely) which will count for 40 points. The final score will thus be out of 100 points.

All details regarding the application procedure, the evaluation of qualifications and the hiring process can be found in the competition announcement (“bando”).

For questions, please contact

Caterina Tiburzi at caterina.tiburzi@inaf.it

Maura Pilia at maura.pilia@inaf.it