

INAF



ISTITUTO NAZIONALE DI ASTROFISICA  
OSSERVATORIO ASTRONOMIC DI TRIESTE

***Subject: selection procedure by qualifications and possible interview for the assignment of one post degree fellowship of the duration of twelve months entitled: : "Development of OO software for the Italian Astronomical Archives (IA2)" at INAF-Osservatorio Astronomico di Trieste  
CUP: C95F22000010005***

**NATIONAL INSTITUTE FOR ASTROPHYSICS  
ASTRONOMICAL OBSERVATORY OF TRIESTE**

The Director

- In accordance with Legislative Decree n. 213 dated 31 December 2009;
- In accordance with INAF Statute entered into force on 1<sup>st</sup> May 2012;
- In accordance with INAF guidelines on organization and operation approved by Resolution n. 44/2012 of INAF Administrative Advisory Panel dated 21 June 2012 entered into force on 23 July 2012;
- In accordance with INAF note prot. n. 82/DA dated 8 March 2002 which stated that Astronomical Observatories can issue fellowship calls on funds from their own budget also if funds are allocated by other Institutions;
- In accordance with instructions of the Director of INAF Department of Research Institutes dated 7 January 2005 and 17 February 2005;
- In accordance with INAF memorandum dated 19 June 2008 prot. 4022;
- In accordance with the guidelines for non-permanent staff position recruitment approved by INAF Administrative Council on 30<sup>th</sup> January 2018;
- In accordance with the motivated request of dr. Cristina Knopic, Technologist at INAF – Osservatorio Astronomico di Trieste, local scientific responsible for project IA2, to issue one fellowship call entitled "***Development of OO software for the Italian Astronomical Archives (IA2)***", registered under prot. n. 3010 dated December 21, 2022
- Ascertained that financial coverage of the fellowship is granted through funds assigned to INAF-Osservatorio Astronomico di Trieste, Ob. Fu. Ob. Fu. 1.05.01.24.08 "Archives: IA2" which amounts to € 26.278,00 (twenty-six thousand-two-hundred-seventy-eight/00) on chap. 1.04.02.03.001 entitled: "Fellowship" and to € 2.272,00 ( two-thousand-two-hundred seventy-two) in chap. 1.02.01.01.001 IRAP of the CRA 1.04 (INAF - Osservatorio Astronomico di Trieste);

DECREES

Art. 1 – Type of fellowship



A public call is open for a selection procedure on the basis of candidates' qualifications, possibly integrated by an interview, for the assignment of one post degree fellowship of the duration of twelve months entitled "*Development of OO software for the Italian Astronomical Archives (IA2)*" at INAF-Osservatorio Astronomico di Trieste.

The activities to be carried out under the grant will be:

1. development and maintenance of archiving software (NADIR) for the Italian Astronomical Archives IA2;
2. development and maintenance of data distribution systems in the context of Big Data for IA2;
3. contribution to the development of support services for data providers (LBT, Asiago, RadioIT, TNG, PRISMA etc.);
4. support for the development of services for the publication of science ready data for IA2;
5. support for the identification of technologies for scientific data in order to facilitate access and usability on appropriate platforms.

The activities covered by this fellowship will be aimed at the maintenance and harmonious development of IA2 and its evolution into 'science ready' archives which will be managed in a coordinated manner with the services and data currently offered.

Such activities will be carried out under the scientific supervision of dr. Cristina Knapic.

#### Art. 2 – Requirements for participation

For participation to the selection described in art. 1 above, the following requirements held at the time of the submission deadline of the application are requested:

- 1) Bachelor Degree (1st level, three-year degree) or Master Degree (2<sup>nd</sup> level, five-year degree) in Physics or Astronomy or Computer Science or Computer Engineering or Multimedia Communication and Information Technologies (L.M. 18) and/or equivalent degrees awarded by foreign Universities and foreign Advanced Institutes;

For the purposes of admission to this selection procedure only, the equivalence of qualifications obtained abroad will be ascertained by the "Selection Board" further mentioned in Article 8, on the basis of the documentation produced by the applicant in question compliant to Article 3 of this "Call". Should such applicant be successful, the Administration, upon accepting the assessment of the "Selection Board" will send the assessment report, together with the required documentation mentioned in Article 3, paragraph 2, letter a) or b) of the Decree of the President of the Republic n. 189 of 30 July 2009 and with the application itself, to the Italian Ministry of University and Research in order to obtain their formal advice as foreseen by Article 4, paragraph 2 of the Decree.

The Bachelor Degree or the Master Degree must have been obtained no later than 4 years from the deadline of the submission of applications.

- 2) Excellent knowledge of Object Oriented programming;
- 3) Excellent knowledge of at least one of the following languages: C++, Java, Python;
- 4) Excellent knowledge of relational databases;
- 5) Knowledge of astronomical and/or radio astronomy data;
- 6) Fair knowledge of document editing software systems (LaTeX , Word, ..);

It will be a preferential title:

- a) Knowledge of code version management tools (GIT);
- b) Knowledge of data structures and search interfaces and/or analysis tools for astronomy and/or radio astronomy;
- c) Attitude to team work.

#### Art.3 – Term and amount



The fellowship is for 12 (twelve) months with possible extension depending on the favourable opinion of the scientific leader of the project and on funding availability, up to a maximum length of 4 years.

Expected starting date of the fellowship is preferably April 1<sup>st</sup>, 2023.

The gross amount of the fellowship is € 26.728 00 (twenty-six thousand-two-hundred-seventy-eight/00). This amount is net of burdens to be charged to INAF-Osservatorio Astronomico di Trieste and will be paid in deferred monthly instalments.

The fellowship cannot be held contemporarily with other fellowships or grants or allowances of the same kind.

#### Art. 4 – Application

Applications must be submitted in English or Italian, by e-mail with acknowledgement of receipt to the following email address: [inafoatrieste\[at\]pcert.postecert.it](mailto:inafoatrieste[at]pcert.postecert.it).

Applications have to be submitted by and not after midday (UT) February 28, 2023. Late submissions will not be considered.

Incomplete applications or applications sent after the deadline for submission will not be considered for the selection procedure.

Applications that are not consistent with the attached form (Annex 1) or without the applicant's signatures will be excluded from the selection procedure.

The application must be submitted with the e-mail subject: "Application for: Fellowship: ***Development of OO software for the Italian Astronomical Archives (IA2)***".

According to art. N. 39 of President's Decree n. 445 dated 28 December 2000, authentication of the candidate's signature on the application is not required. Applications without the applicant's signature will be excluded from the selection procedure.

Applications showing evident inconsistency between the content and the attached documentation will be also excluded from the selection.

Exclusion of candidates will be made by reasoned order of the Director of the Astronomical Observatory of Trieste. Excluded candidates will be informed by registered letter with acknowledgment of receipt.

The Astronomical Observatory of Trieste will not be liable for possible delayed or wrongly-routed consignment of communications to applicants in case of lacking or late information of the change of the candidate's address for communications in the application.

In the application the candidate must supply the following information in clear and detailed form:

- a) surname and first name;
- b) place (town, country) and date of birth (day/month/year);
- c) fiscal code number;
- d) citizenship;
- e) declaration of the candidate's present enjoyment of civil and political rights of the State of which she/he holds citizenship;
- f) educational qualification(s), date and place of award and final marks;
- g) place of residence;
- h) fulfilment of required military service;
- i) postal address where applicants wish to receive communications relevant to the selection, and possibly phone and e-mail contacts.

In addition, in the application the candidate must declare under her/his personal liability:

- j) not to have been in the past or to be at present under any penal sentence. Otherwise the candidate should specify which are still outstanding.



k) if the candidate held in the past or is presently holding other grants or fellowships of whatever kind from private or public institutions. In this case the duration should be specified.

The following qualifications must be attached to the application:

1. candidate's curriculum vitae et studiorum (CV), bearing date and signature of the candidate, including a list, if applicable, of grants and fellowships held in the past;
2. list of publications;
3. Any additional papers or scientific works that the candidate may consider useful to qualify his/her technical/scientific CV;
4. Candidates holding educational qualifications obtained abroad are required to explicitly clarify if, according to the relevant regulation, they have already been recognized or declared as equivalent to one of the qualifications requested for admission to the selection procedure of this "Call".

In lack of the declaration above, candidates must attach to the application to the selection procedure a copy of the certificate, or alternatively any documents which attest the educational qualification held, the list of taken examinations and/or the training and research activities carried out and the final score, with the aim of enabling the Selection Committee to acquire all necessary elements for assessing equivalence to one of the qualifications required for admission to the selection procedure of this "Call".

5. a detailed summary list of qualifications and of all attached documents;
6. a personal declaration (valid as self-certification for both Italian and European Community citizens) that: the candidate holds the degree required in article 2 of the present selection procedure.

The above declaration must be written according to the attached form format (Attachment 2), and must bear the date and signature of the applicant. A photo copy of a valid identity document must be attached. In using self-certification the candidate should list the submitted qualifications with details which may enable the Observatory's Administrative Office to verify all personal declarations. Otherwise the candidate may submit either the original qualification documents or certified true copies of the qualification documents.

#### Art. 5 – Selection Committee

Applications will be examined by a Selection Committee appointed by the director of INAF-Osservatorio Astronomico di Trieste. Selection of candidates is based on qualifications. In the first meeting the Selection Committee will define the evaluation criteria for the qualifications. If necessary, the Selection Committee may summon selected candidates for an interview. The Committee will define in advance and register on official minutes the evaluation criteria for the interview.

Candidates selected for the interview will be summoned in good advance by registered letter with acknowledgment of receipt.

The ranking score of the Selection Committee (100 score) is divided as follows: a maximum score of 70/100 for qualifications and a maximum score of 30/100 for the interview.

Candidates who have obtained, during the assessment of qualifications, a score of no less than 50/70 will be admitted.

The evaluation of the qualifications is divided as follows:

- a) Additional qualifications to those required: up to a maximum of 10/70;
- b) CV and professional activities related to the purposes of the call: 45/70;
- c) articles and technical publications related to the announcement: up to a maximum of 15/70

In the event of equal scores, the PhD is considered a preferential qualification.



The eventual additional exam will consist of an interview and will focus on the topics specified below, pertaining to the profile for which the selection is announced:

- 1) management and organization of relational databases;
- 2) OO programming, techniques and libraries of known language(s);
- 3) knowledge of client-server communication;
- 4) data structures;

The Commission shall rank eligible applicants. The ranking list shall be notified through posting on the online Notice Board of INAF-Osservatorio Astronomico di Trieste.

The Official records of the selection procedure shall be approved through INAF-Astronomical Observatory Directorial Decree.

#### Art. 6 – Notification to the successful candidate

The Director of the Astronomical Observatory will send formal notification to the successful candidate of the assignment of the fellowship, of the starting date and conditions of fruition of the fellowship.

Within the peremptory time-span of ten days after notification's receipt, the fellowship winner shall provide formal acceptance of the fellowship without reservation. In the acceptance declaration the successful candidate will explicitly declare, under his responsibility, that for the duration of the fellowship he/she shall not benefit from any other fellowships or from contributions and similar grants, and that he/she will not get any salaries or income of any kind from public or private Institutes. The Astronomical Observatory of Trieste will not be liable both for possible wrongly-routed consignment of communications to applicants by the Observatory due to incomplete or unclear personal data and address of the applicants or to lacking or late information of change of the address in the application form, or due to possible error in postal delivery. Under no circumstances the present fellowship implies the obligation to employ the successful candidate at INAF-Astronomical Observatory of Trieste.

The fellowship does not represent subordinate employment and does not include social security benefits. The fellowship holder is bound to take out health insurance and insurance against accidents at work personally without any burdens charged to INAF- Astronomical Observatory of Trieste. The fellowship holder must send written notification of drawing up of the insurance policy, otherwise revocation of the fellowship is foreseen. The fellowship holder is also bound to issue periodical activity reports every six-months.

#### Art. 7 – Termination of the fellowship

The fellowship holder will be excluded from the fellowship when he/she fails to start the expected training activities.

If the fellowship holder fails to carry out his/her training duties regularly for the whole fellowship term after having started his/her training activities, or is responsible for serious duty faults or should not prove adequately fit to carry out the planned research activity, upon proposal of the scientific responsible of the project the fellow will be excluded from further fruition of the fellowship by reasoned order. The termination order will be motivated and communicated to the fellow. In case of renunciation or termination of the fellowship by the successful candidate, the grant shall be awarded to the following best candidates in the ranking list.

#### Art. 8 – Publicity

This announcement shall be sent electronically to the Italian Astronomical and Astrophysical Observatories and to Astrophysical Research Institutes. It will be published on the web page of the National Institute for Astronomy and Astrophysics ([www.inaf.it](http://www.inaf.it)) and of the Astronomical



Observatory of Trieste ([www.oats.inaf.it](http://www.oats.inaf.it)), and posted on the Official online Notice Board of the latter.

#### Art. 9 – Applicable regulation

The Astronomical Observatory shall abide by the provisions promoting equal opportunities for women and men and ruling the processing of personal data as applicable to fellowship calls.

Applicants are entitled to the rights as of article 13 of Italian Law Decree (D. Lgs) no. 196/2003, among which the right of access to their personal data, and also to some additional rights such as the right of modification, updating, completion and cancellation of erroneous, or incomplete data, as well as of data collected in terms non pursuant to the Law. Applicants have also the right to oppose to the use of their personal data for legitimate reasons.

For what not explicitly mentioned in this announcement, the Astronomical Observatory shall act in compliance with the regulations in force concerning public selection procedures.

Trieste, December 23, 2022

Il Direttore  
Dott. Fabrizio Fiore