



Determina n. 133/2019

CALL for a A-type Post-doc grant application entitled "Software development for the ASTRI Mini-Array"

## Art. 1 – Research project

The Italian National Institute for Astrophysics - Catania Astrophysical Observatory (INAF-OACt) invites applications for a 12-month full time grant, in the framework of the preparatory effort for partecipating in the CTA project.

The successful applicant will be involved in the software development for the ASTRI mini array under the scientific supervision of dr. Alessandro Costa.

The awarded fellow is expected to carry out the following activities:

- Codes development for the analysis of time series of data both in batch and in streaming mode;
- Development of systems for monitoring management of data series

### Art. 2 – Requirements

In order to participate in the selection, applicants must possess, on pain of exclusion, the following requirements:

• PhD degree in Physics, Astronomy, Computer science or Computer Engineering;

Or

• Master's Degree in Physics, Astronomy Computer science or Computer Engineering which gives access for the admission to a doctorate course, awarded by an Italian university or by a foreign university, together with at least three years of documented experience in scientific or technological activities

The requirements need to be obtained within the deadline of the application

The following knowledge, skills and experience will be considered as preferential qualifications:

- 1) Knowledge of technologies related to Internet of Things
- 2) Knowledge of Java and Pythn languages

## Art. 3 – Application procedure

Applications, dated and signed by the applicant, must be submitted in English or Italian via email to the following email address:

inafoact@pcert.postecert.it

The e-mail subject should be:" Application to post- doc grant "Software development for ASTRI"

Alternatively, application should be sent by certified mail to the following address:

INAF - Osservatorio Astrofisico di Catania Via Santa Sofia, 78 I-95123 Catania, Italy Tel.: +39-095-7332 111 Fax: +39-095-330592 Sede "Mario G.Fracastoro" (Etna) – Tel +39-095-911580 Fax+39-095-916184 www.oact.inaf.it - inafoacatania@pcert.postecert.it





INAF-Osservatorio Astrofisico di Catania
Via Santa Sofia 78
95123 Catania
The envelope must contained the name of the sender and the following caption: Application to post- doc grant "Software development for ASTRP"
Applications must be submitted by 13:00 September 2 2019.

Late submissions will not be considered. INAF accepts no responsibility for the loss of applications or documents, due to the applicant having provided incorrect contact details or having failed or delayed in notifying changes of these details, or to problems with postal delivery not due to INAF.

Applications which are not consistent with the attached forms (Annexes 1,2) or without the applicant's signatures will be excluded from the selection procedure.

Aware that false declarations are punishable by law and that the Administration will carry out random checks on their accuracy, the applicant must state clearly and precisely in the application, under his/her own responsibility:

- name(s) and surname, date and place of birth, nationality, place of residence and address for correspondence;
- that s/he satisfies all the requirements described in article 2 of this Call;
- that s/he is aware of and is not ineligible under any of the restrictions described in article 4 of this Call.

The lack of any of the abovementioned declarations will determine the exclusion from the selection procedure for incomplete application.

For selection purposes the applicants:

- shall directly state any academic qualifications in the application form (Annex A and B)

The following documents have to be submitted:

- Application form (Annex A);
- Curriculum vitae", **signed and dated** by the applicant, providing evidence of possession of the titles and the skills required to carry out the research and including a list, if applicable, of grants and grants held in the past and a statement of research interests;
- Copy of the PhD certificate or of equivalent foreign academic qualification
- copy of a valid identity document (ID card or passport);
- list of publications;
- Declaration (Annex B) where the applicant must state clearly and precisely, under his/her own responsibility:
- • name(s) and surname, date and place of birth, nationality, place of residence and address for correspondence;
- • that he/she satisfies all the requirements described in article 2 of this Call;
- • that he/she is aware of and is not ineligible under any of the restrictions described in article 4 of this Call. The declaration must be signed and dated. A copy of valid identity document need to be enclosed. The lack of any of the above-mentioned declarations will determine the exclusion from the selection procedure due to incomplete application.
- any other qualification, working task, research activity for public and private institutions and publications that the applicant deems appropriate to submit.

### INAF - Osservatorio Astrofisico di Catania

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Applicants are admitted for selection with reservation and may – at any time – be notified of exclusion from the selection procedure for the following reasons:

- submission of the application after the deadline;
- failure to complete and sign the application form;
- failure to sign the curriculum vitae;
- lack of the copy of a valid identity document;
- lack of the requirements indicated in paragraph 2.

Should the reasons for exclusion be ascertained after completion of the selection procedure the applicant will lose any right deriving from participation in the selection procedure; similar loss will be applied to applicants providing any false statement or document.

INAF accepts no responsibility for lost applications or documents where this is due to the applicant having provided incorrect contact details or having failed or delayed in notifying any changes to these details.

#### Art. 4 – Ineligibility and incompatibility with other funding

Full professors, associate professors and researchers in Italian universities and employees of Italian research public institutions are all excluded from entering the competition.

The grant cannot be held at the same time with attendance at academic courses as those that formally give access to a doctorate, as well as with attendance at PhD courses with grant.

The grant cannot be held contemporarily with other grants of whatever kind, except those awarded with the aim of integrating the training or research activity of the grant holder through a period spent abroad.

Aggregation of income from working activities, also part-time, carried out continuously is not accepted. Instead, limited self-employed occasional work is compatible with the grant, only if this is not prejudicial to the research activity carried out for INAF. This must be authorized in advance by the Director of INAF- Osservatorio astrofisico di Catania.

Retired persons are not eligible for Research grant.

Also excluded from participation are any person who has carried out Research grants under article 22 of Italian Law 240/2010 for a total period exceeding four years, including extensions, but excluding the periods in which the grant has been held in coincidence with doctoral studies up to the maximum legal time limit of the course and excluding periods of maternity leave or sick leave, in accordance with current legislation.

#### Art. 5 – Duration of the Research grant

The Research grant is expected to begin on **15 October 2019** for the duration of 12 months. The exact initial date could be reasonably delayed if requested by the completion of administrative procedures

The exact initial date could be reasonably delayed if requested by the completion of administrative procedures and/or for the cases mentioned in the art. 10 of this call.

In accordance with Italian Law n. 240/2010 the duration of the grant, inclusive of possible renewal, will not exceed six years, excluding periods of maternity leave or sick leave, in accordance with current legislation.

### Art. 6 – Host Institution

The fellow will carry out the research at the premises of INAF-Osservatorio Astrofisico di Catania

#### Art. 7 – Salary amount

The gross annual salary will be **32.000** Euro. This amount is net of burdens to be charged to INAF-Osservatorio Astrofisico di Catania, social charges and health coverage and will be paid in deferred monthly instalments. The fellow will be requested to have a personal accidents insurance for the duration of the grant.





Italian fiscal and social security rules will be applied.

During the period of obligatory maternity leave the allowance paid by INPS (Italian National Institute for Social Security) is supplemented by INAF up to the total amount of the grant. The period of obligatory maternity leave will not contribute to the duration of the grant foreseen by the contract.

## Art. 8 – Selection Committee and selection procedure

The selection will be carried out by the examining Committee appointed by the Director of INAF- Osservatorio Astrofisico di Catania and is composed of 3 members.

The selection is based on qualifications possibly integrated by an interview.

The commission has a total of 100 points, of which up to a maximum of 70 for the titles and the remaining 30 for the eventual interview.

The examining committee will proceed with the examination of the curriculum vitae et studiorum and the qualifications presented on the basis of the criterion of relevance to the topic of the research grant

The evaluation of the qualifications precedes the possible interview and will be carried out on the basis of the documents attached to the application by the candidates. The following titles will be evaluated:

a) Master's degree or old degree thesis: up to 15 points

b) PhD thesis: up to 15 points

c) Contracts, scholarships and research assignments, up to 15 points

d) Curriculum vitae et studiorium which shows the training and experience acquired and documented carried out

at research institutions, universities or other Italian or foreign public scientific institutions: up to 10 points

e) Publications in the fields related to the research program: up to 15 points,

An excellent knowledge of the English language is required, to be proven with adequate documentation.

With the same score it is considered preferential title: knowledge of technologies related to the internet of things knowledge of Java, Python languages;

Candidates who do not have a score of at least 40 points in the assessment of qualifications will not be considered suitable.

Applicants selected for the interview will be summoned with 15 days notice by e-mail with acknowledgement of receipt, containing the individual score for qualifications.

The possible interview will focus on the topics covered by the planned research activity. The minimum score for passing the interview is 20 points.

The Commission will draw up, on the basis of the sum of the scores reported by the individual candidates, the ranking and propose the assignment of the contract to the first classified candidate.

The ranking will be approved by the Director of INAF-Astrophysical Observatory of Catania, and will be published by the Director himself, by posting on the notice board and on the INTERNET website of the Observatory.

INAF - Osservatorio Astrofisico di Catania





### Art. 9 – Awarding of the grant

The highest ranked candidate will receive written notification of award of the research grant.

Within 10 days from receipt of the formal notification of the award she/he must provide a formal declaration of acceptance of the research grant. The declaration will also state that she/he is not subject to any of the exclusion conditions listed in article 4 of this Call.

If the candidate does not provide declaration of acceptance within a time limit of 10 days, she/he will surrender his/her entitlement to the research grant and it can be awarded to the next ranked candidate.

Under no circumstances the signing of the contract starts a subordinate employment relationship or ensures any rights to access to permanent INAF staff positions.

The holder of the grant:

- will start the research activity at the date due as per the contract at INAF-Osservatorio astrofisico di Catania, unless prevented by force majeure or exceptional circumstances, of which the Director must be timely informed;
- is required to issue an activity reports every 12 months. The activity reports will be subject to approval from the scientist in charge of the project and will be transmitted to the Director of INAF-Osservatorio Astrofisico di Catania. Approval failing, duly reasoned by the scientist in charge, will give INAF-Osservatorio Astrofisico di Catania the right to terminate the contract;
- is required to send a written note in case of withdrawal, with at least 30 days notice, otherwise the INAF is entitled to retain or request the reimbursement of the salary amount corresponding to the notice time-span she/he has failed to send.

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The holder of the grant who does not carry out her/his research activity regularly without producing justified reasons or lacks repeatedly to fulfil requirements or, according to the evaluation of the local coordinator of the activities, Dr. Costa, eventually shows evident lack of skills at the planned research activities, will incur the termination of the contract.

Temporary suspensions of the research grant are due in case of obligatory maternity leave or in case of illness which lasts longer than one month or to any other serious reason. The reasons for suspending the research grant must be proved and certified, and promptly sent to the Director of INAF-Osservatorio Astrofisico di Catania.

According to REGULATION (EU) 2016/679 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 April 2016 concerning the protection of natural persons with regard to the processing of personal data, as well as the free movement of such data and repealing Directive 95/46 / EC (regulation on data protection), the personal data provided by the candidates will be collected at the INAF-Catania Observatory for the purposes of managing the selection and will be processed in an automated database for managing the relationship resulting therefrom. The provision of such data is mandatory for the purpose of assessing the participation requirements, on pain of exclusion from the selection.

Catania, 02.08.2019

The Director (Dott. Isabella Pagano)



