



D.D. nr. 137/2018

Selection procedure nr. 2/2018/IASF-PA/AR based on qualifications and a possible interview for the award of 1 research grant, in the framework of the ASTRI/CTA project *“Redesign and electronic measurements of the ASTRI Camera high voltage supply for SiPM photodetectors and firmware implementation for calibration procedures”*.

Selection procedure nr. 2/2018/IASF-PA/AR”.

THE DIRECTOR

- In accordance with** the INAF Statute, approved on 7 March 2011, and effective as of 1 May 2011 May;
- In accordance with** Italian Law n.240 dated 30 December 2010, article 22;
- In accordance with** the INAF Regulations for the award of research fellowships approved by the Administrative Council on 22 June 2011, Resolution n. 06/11 and subsequent modifications and integrations;
- In accordance with** the guidelines for non-permanent staff position recruitment approved by INAF Administrative Council on 30 January 2018;
- In accordance with** the provisional guidelines for the assignment of research grants approved by INAF Administrative Council on 23 March 2018;
- In accordance with** the request prot. nr. 451/2018 by Mr. Osvaldo Catalano, CO.PI. ASTRI-Project, Dirigente di Ricerca allocated to INAF IASF Palermo;
- Considering** it appropriate to issue an announcement of competition for the award of a research fellowship;
- Given** the availability of financial resources from fund Ob.Fu. 1.05.03.37.03 “Astronomia Industriale” – Ch. 1.01.01.01.009 “Research Grants”.

DECREES

Art. 1
Research project

A selection based on titles and qualifications, possibly integrated by an interview, is open to award one grant, in the framework of the ASTRI/CTA project. The grant is entitled: **Redesign and electronics measurements of the ASTRI Camera high voltage supply for SiPM photodetectors and firmware implementation for calibration procedures**. The activities will focus on the following aspects:

1. Redesign of the VDB's daughterboard (Voltage Distribution Box) of the ASTRI Camera, in order to meet both the increased current demand of the new generation SiPM photodetectors and the CTA NSB (Night Sky Background) Requirements.
2. Electronics measurements and environmental tests on the newly produced daughterboard.
3. Firmware redesign in order to implement the calibration procedures and to optimize the already implemented functions.

The position is based at INAF IASF di Palermo (Italy) with the possibility of frequent travels to other members of the consortium or to external companies depending on the needs of the project.

The activities will be carried out under the supervision of Mr. Osvaldo Catalano, Co-Principal Investigator of the ASTRI Project.

Art. 2
Requirements

In order to participate to the selection, applicants must possess, under penalty of exclusion, by the deadline for the application to this position:

- PhD degree in Physics or Electrical Engineering or Electronics Engineering awarded by an Italian University or by a foreign University.

Or alternatively

- Degree in Physics or Electrical Engineering or Electronics Engineering or equivalent, awarded by an Italian University or by a foreign University with at least three years of documented experience in the same or very similar field of this grant.

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

- Automation controls specialization
- Experience with analog electronic design, oriented to isolated high voltage and low noise power supply
- Experience in electronics measurements setup
- Experience in environmental tests for high voltage power supply
- Experience with software and firmware design for microcontrollers in C, C++ language
- Experience of self calibration procedure algorithms for microcontrollers
- Experience in control algorithms for microcontroller implementation
- Experience with uVision software.
- Experience with multilayer PCB design by Altium Designer software
- Excellent proficiency in English language.

Art. 3
Duration of the Research fellowship

The research fellowship is expected to start as soon as possible, but no later than December 2018 and has a duration of **one year**. The fellowship may be renewed for a second year. The exact starting date may be delayed if required for the completion of administrative procedures and/or for the cases mentioned in the art. 10 of this call.

Art. 4
Application procedure

Applications must be submitted in English in a closed envelope by:

-authorized carrier (ex. DHL, FedEx, UPS etc., preferable choice for applications coming from outside Italy),

-“Raccomandata A/R”,

- delivered by hand, to the address INAF – Istituto di Astrofisica Spaziale e Fisica Cosmica di Palermo – Via Ugo La Malfa n.153 – 90146 Palermo (Italy).

The application can be also submitted using a PEC account (Posta Elettronica Certificata: **no ordinary e-mail**) to the following PEC address: inafiasfpa@pcert.postecert.it

It is mandatory that the PEC account is registered with the applicant's name, on penalty of exclusion from the present call.

Applications must arrive no later than October 30, 2018 – 7.00 p.m. (CET).

Late delivery will not be considered.

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

The application must report on the envelope or in the PEC subject “Selection procedure nr. **2/2018/IASF-PA/AR**”.

Aware that false declarations are punishable by law and that the Administration will carry out random checks on their accuracy, the applicants must state clearly and precisely in the application form (Annex 1), under their 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.

In the absence of any of the above declarations, the applicant will be excluded from the selection procedure.

For selection purposes the applicants:

- must directly state any academic qualifications in the application form (Annex 1);
- if successful, candidates with non-italian academic qualifications (for example, applicants residing outside Italy or Italian citizens with degrees obtained outside Italy), must provide a certificate of equivalence of the academic qualifications produced by Presidenza del Consiglio

dei Ministri – Dipartimento della Funzione Pubblica – Ufficio P.P.A. (Art. 38 D. Lgs 165/2001 e Art. 2 DPR 189/2009).

Applications must include the following documents:

- Annex 1 “Application form” signed and dated by the applicant;
- Annex 2, signed and dated by the applicant;
- Curriculum Vitae, duly signed and dated by the applicant, providing evidence for possession of the requirements and the skills required to carry out the research, and including a list, if applicable, of grants and fellowships held in the past and a statement of research interest;
- List of publications;
- Copy of a valid identity document (ID card or passport);
- If obtained outside of Italy, copy of the Master Degree or PhD certificate ;
- Any other qualification, working task, research activity for public and private institutions and publications that the applicant deems appropriate to submit;
- A maximum of two reference letters, to be sent directly by the referees to the address concorsi@iasf-palermo.inaf.it by October 30, 2018, 7.00 p.m. (CET).
Letters received after this deadline will not be considered.

Applications that are not consistent with the attached forms (Annex1 and 2) or have not been signed by the applicant will be excluded from the selection procedure.

Applicants are admitted for selection with reserve and may – at any time – be excluded from the selection procedure for the following reasons:

- Submission of the application after the deadline;
- Incomplete and/or unsigned application forms;
- Failure to sign the curriculum vitae;
- Lack of the copy of a valid identity document;
- Lack of the requirements indicated in article 2 of this Call.

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

It is under the responsibility of the applicant to provide correct contact details for communication purposes. INAF accepts no responsibility for any miscommunication that may arise due to inaccurate contact details or if such details are out of date. INAF also denies liability for any problem related to the postal delivery service.

Art. 5

Ineligibility and incompatibility with other funding

The grant cannot be awarded to full professors, associate professors or research staff in Italian universities or to employees of public Italian research institutions.

The grant is not compatible with attendance to academic courses as those that formally give access to a doctorate, as well as with attendance to PhD courses with fellowship.

The grant is not compatible with other fellowships of whatever kind, except those awarded with the aim of integrating the training or research activity of the fellowship holder through a period spent abroad. Aggregation of income from working activities, also part-time, carried out continuously is not permitted. 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-Istituto di Astrofisica Spaziale e Fisica Cosmica di Palermo. Retired persons are not eligible for the Research fellowship.

The candidate who does not satisfy the provision of co.9 of article 22 of Italian Law 240/2010 is excluded from the selection.

Upon formally accepting the grant, the successful applicant will issue a declaration that none of the above exclusions apply.

Art. 6 Host Institution

The successful fellow will be required to spend a significant fraction of his/her time at INAF – Istituto di Astrofisica Spaziale e Fisica Cosmica di Palermo – Via Ugo La Malfa n.153 – 90146 Palermo (Italy).

Art. 7 Salary amount

The gross annual salary for this grant is **28.000 Euro**. This amount is net of burdens to be charged to INAF/IASF Palermo, 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 fellowship.

Italian fiscal and social security rules will be applied.

During the period of mandatory 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 mandatory maternity leave will not contribute to the duration of the grant stated in the contract.

Art. 8 Selection Committee and selection procedure

The selection will be performed by a Selection Committee appointed by the Director of INAF – Istituto di Astrofisica Spaziale e Fisica Cosmica di Palermo, composed by three members, including the scientist in charge of the project.

The selection is based on qualifications, integrated by an interview, if needed. The Selection Committee can establish a short list of eligible applicants to be interviewed, on the basis of titles, qualifications, and documented experience in the scientific or technological activities on the specific subject of the research fellowship. All the stages of the selection procedure (e.g. meetings of Selection Committee, interviews and so on) can be performed also using electronic devices for communications. Applicants selected for

the interview will be summoned with a 15-day notice, with the communication of the individual score for qualifications.

The total ranking score is 100 points: a maximum of 70 for titles and qualifications, and a maximum of 30 for the interview (which is not mandatory).

At the end of the selection procedure the Selection Committee will produce a ranked list.

The approval decree of the selection procedure and the ranked list will be published on the following website www.iasf-palermo.inaf.it

Art. 9

Awarding of the fellowship

The highest-ranked candidate will receive a written notification for the award of the research fellowship. Within 20 days from receipt of the formal notification of the award he/she must provide a formal declaration of acceptance of the research grant. The declaration will also state that he/she is not subject to any of the exclusion conditions listed in article 5 of this call. In case no declaration is received within 20 days, the candidate is considered as withdrawn and thus excluded. The committee can then move down the ranking and repeat the procedure with the second-ranked candidate, and so on, until the fellowships are accepted.

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

Art. 10

Fellowship obligations

The holder of the fellowship:

- will start the research activity on due date, as for the contract with INAF – Istituto di Astrofisica Spaziale e Fisica Cosmica di Palermo, unless prevented by force majeure or exceptional circumstances, of which the Director of INAF - Istituto di Astrofisica Spaziale e Fisica Cosmica di Palermo must be timely informed;
- will carry out his/her research activities under the supervision of the Principal Investigator of the project, Osvaldo Catalano, who will also monitor the fellow's progress;
- is required to issue periodical activity reports as established in the contract. The activity reports will be subject to approval by the project supervisor. Approval failing, duly justified by the supervisor, will give INAF – Istituto di Astrofisica Spaziale e Fisica Cosmica di Palermo the right to terminate the contract;
- is required to send a written note in case of withdrawal, with at least 30 days notice, otherwise INAF – Istituto di Astrofisica Spaziale e Fisica Cosmica di Palermo is entitled to retain or request the reimbursement of the salary amount corresponding to the notice time-span he/she has failed to send.

The holder of the fellowship who fails in carrying out his/her regular research activity, without producing justified reasons or lacks repeatedly to fulfil requirements or, according to the evaluation of

the scientist in charge, eventually shows evident lack of skills at the planned research activities, will incur in the termination of the contract.

Temporary suspensions of the research fellowship are due in case of mandatory maternity leave or in case of illness lasting longer than one month or to any other serious reason. The reasons for suspending the research fellowship must be proved and certified, and promptly sent to the Director of INAF - Istituto di Astrofisica Spaziale e Fisica Cosmica di Palermo.

Art. 11
Personal Data

In accordance with art. 13, paragraph 1 of the Italian Legislative Decree n. 196/2003 and subsequent modifications, personal data provided by the candidates will be used exclusively for the purposes of this selection. Candidates who wish to obtain further information, or to exercise their rights under art. 7 of the above mentioned Legislative Decree, may contact the administration employee in charge for this call.

Art. 12
Person in charge for the procedure

The person in charge for the selection procedure relevant to this competition announcement is Dr. Giancarlo Cusumano (e-mail giancarlo.cusumano@iasf-palermo.inaf.it)

Art. 13
Applicable regulation

INAF - Istituto di Astrofisica Spaziale e Fisica Cosmica di Palermo shall abide by provisions in force promoting equal opportunities for women and men, non-discrimination and respect of privacy in processing personal data.

For what not explicitly mentioned in this announcement, INAF – Istituto di Astrofisica Spaziale e Fisica Cosmica di Palermo shall act in compliance with the regulations in force concerning Italian public selection procedures, when applicable by analogy.

The present call will also be published on the following web sites:

<http://www.inaf.it>

<http://www.iasf-palermo.inaf.it>

Palermo, September 24, 2018

The Director

