

D.D. nr. 171/2018

In accordance with

Selection procedure nr. IASF-PA/AR/5/2018 based on qualifications and a possible interview for the award of 1 research grant, in the framework of the ASTRI CTA Data Challenge project. TITLE: "Emission models and simulations in the Gamma-ray band of galactic and/or extragalactic compact sources".

Selection procedure nr. IASF-PA/AR/5/2018.

THE DIRECTOR

In accordance with	the Legislative Decree 4 June 2003, n. 138, which provides for the Reorganization of the National Institute of Astrophysics (I.N.A.F.); published in the G.U. n. 140 of June 19, 2003;
In accordance with	the Legislative Decree of 31 December 2009, no. 213 implementing the art. 1 of the Law of September 27th 2007 n. 165;
In accordance with	the INAF Statute adopted by the Board of Directors with Resolution no. 42 of 25 May 2018 and entered into force on 24 September 2018;
In accordance with	the Organization and Operation Regulations (DOF) of the INAF, approved by resolution of the Board of Directors no. 44/2012 of 21 June 2012 and entered into force on 22 July 2012;
In accordance with	the INAF's Staff Regulations, approved by resolution of the Board of Directors no. 23 of 11 May 2015 published in the Official Gazette General Series n. 253 of 30 October 2015;
In accordance with	the Regulation on administration, accounting and contract activity of the INAF, published in the S.O. n. 185 to the G.U. General Series n. 300 of 23 December 2004;

the Law of 13 August 1984 n. 476, art. 4;

In accordance with The Decree of the President of the Republic 22 December 1986, n. 917

and subsequent amendments and additions to "Approvazione del Testo

Unico delle Imposte sui Redditi ";

In accordance with the Law of 8 August 1995, n. 335 and subsequent modifications and in

particular art. 2, paragraphs 26 and following;

In accordance with the Law of 27 December 2006 n. 296 and subsequent modifications, in

particular art. 1, paragraph 788;

In accordance with the Decree of the Minister of Labor and Social Welfare 12 July 2007,

published in the G.U. n. 247 of 23 October 2007;

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 of 30 December 2010, articles 22 and 29;

In accordance with the Law of 7 August 1990, n. 241 and subsequent amendments and

additions on " Nuove norme in materia di procedimento amministrativo

e di diritto di accesso ai documenti amministrativi";

In accordance with the D.P.R. 28 December 2000, n. 445 on "Disposizioni legislative in

materia di documentazione amministrativa (Testo A)";

In accordance with the directive of the Minister of Public Administration and Simplification

n. 14/2011 for the application of the new provisions concerning certificates and substitutive declarations pursuant to art. 15 of the Law

of 11 November 2011, n. 183;

In accordance with the Legislative Decree of 30 June 2003, n. 196 and subsequent

amendments and additions, with the "Codice in materia di protezione

dei dati personali";

In accordance with the D.P.R. 11 February 2005, n. 68 "Regolamento recante disposizioni

per l'utilizzo della Posta Elettronica Certificata", art. 27 of the Law of 16

January 2003, No. 3;

In accordance with the Legislative Decree of 7 March 2005, n. 82 containing the "Codice

dell'Amministrazione Digitale"

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;

Considering it appropriate to issue an announcement of competition for the award

of a research fellowship;

Taking into account the request presented on December 7 2018 (prot n. 578/18) by Dr.

Valentina La Parola, researcher of IASF Palermo, to open a procedure for awarding a research fellowship of 12 months (possibly renewable) entitled "Emission models and simulations in the Gamma-ray band of

galactic and/or extragalactic compact sources";

Given the availability of financial resources from fund ASTRI CTA Data

Challenge - 1.16 Istituto di Astrofisica Spaziale e Fisica Cosmica di Palermo, Ob. Fu. 1.05.1.05.01.88.01 "ASTRI CTA Data Challenge – Ref.

Caraveo" - CUP C52F14000410001;.

Given the clearance of the INAF ticket service (12-12-2018);

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 Data Challenge project. The grant is entitled: "Emission models and simulations in the Gamma-ray band of galactic and/or extragalactic compact sources".

The position offered provides an opportunity to carry out scientific or technological research in a fostering environment to those candidates that deem it useful for their professional development. The position is aimed to carry out the project described, and does not refer to needs of permanent personnel for INAF or for the project itself.

The position is based at INAF IASF di Palermo (Italy) and the activities will be carried out under the supervision of Dr. Valentina La Parola.

The activities will focus on the following aspects:

"development of models and comparison with observations and/or simulated data in the GeV/TeV energy band of galactic and/or extragalactic compact sources. He/She will be involved in the CTA-ASTRI Pathfinder activity, and in particular in the ASTRI CTA Data Challenge (ACDC) project; he/she will also be involved in the development of data analysis and reconstruction algorithms for Cherenkov Telescope data and in the simulation of observational data in the GeV/TeV energy range".

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 Astronomy awarded by an Italian University or by a foreign University.

Or alternatively:

- Degree in Physics or Astronomy, 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:

- a) experience in Cherenkov data analysis;
- b) experience in high energy data analysis;
- c) knowledge of C++ and Python programming languages.

The requirements for admission to the competition must be held before the deadline of this call.

Art. 3 - Application procedure and deadlines

Applications, dated and signed by the applicant, can be submitted either in English or Italian before **15** January **2019** (late delivery will not be considered). Applications should be written according to the Annex and sent in one of the following ways:

- a. using a PEC account (Certified Email: no ordinary email) 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. Documents should be attached as read-only pdf files;
- b. authorized carrier (e.g. DHL, FedEx, UPS etc., preferable choice for applications coming from outside Italy).
- c. Raccomandata A/R (returned registered post) or 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 letter must report on the envelope or in the PEC the subject "Selection procedure IASF-PA/AR/5/2018".

Application bereft of signature will be automatically excluded.

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.

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 form (Annex 1), under his/her own responsibility:

- a) name(s) and surname;
- b) date and place of birth, nationality;
- c) place of residence and address for correspondence;
- d) nationality;
- e) to satisfy all the requirements described in Article 2 of this Call;
- f) to be aware of and to be not ineligible under any of the restrictions described in Article 4 of this Call;
- g) contact information (address, email, telephone number).

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

Applications must include the following documents:

- 1. Annex first page; "Application form" signed and dated by the applicant;
- 2. Annex second page; signed and dated by the applicant;
- 3. 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;
- 4. List of publications;
- 5. Any other qualification, working task, research activity for public and private institutions and publications that the applicant deems appropriate to submit; these documents should be explicitly declared in a numbered list;
- 6. Copy of a valid identity document (ID card or passport).

Applications that are not consistent with the attached forms (Annexes) or have not been signed by the applicant will be excluded from the selection procedure. Documents can be provided also inside a read-only CD-ROM.

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

- Submission of the application after the deadline;
- Incomplete and/or unsigned application forms;
- Lack of signature of 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.

Art. 4 - 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. 5 - Grant Duration and start date

The grant covers a period of one year and can be possibly extended for another year if funding is available and the Scientific supervisor expresses a positive opinion. Scheduled start date of the grant is February 2019. The start date and renovation are subject to constraints as regulated by Art.22/comma 3/Law 240/2010.

Art. 6 - Host Institution

The successful applicant will be required to spend a significant fraction of his/her working 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 installments.

Art. 8 – Fiscal and social security matters

Research grants are subject to the provisions of art. 4 of Law of 13 August 1984, n. 476, as well as, in matters of social security, those pursuant to art. 2, paragraphs 26 and following, of the Law of 8 August 1995, n. 335, and subsequent modifications, in the matter of compulsory maternity leave, the provisions of the decree of the Minister of Labour and Social Welfare 12 July 2007, published in the Official Gazette no. 247 of 23 October 2007, in the matter of sick leave, art. 1, paragraph 788 of the Law of 27 December 2006 no. 296 and subsequent modifications, and with regard to the stabilization and extension of unemployment benefits for workers with a coordinated and continuous collaboration relationship, article 7 of Law 22 May 2017, n. 81 published on the G.U. General series n. 135 of 13/06/2017.

In the period of compulsory maternity leave, the indemnity paid by the INPS pursuant to art. 5 of the aforementioned decree of 12 July 2007 is supplemented by the INAF up to the total amount of the

research grant. The period of compulsory maternity leave does not contribute to the duration of the contract provided for in the contract. The holder of the fellowship will have to provide for his expenses at the stipulation of an insurance policy against accidents that he will have to exhibit at the moment of the formalization of the relationship. For grants awarded as part of research projects funded by the European Union or other foreign, international or supranational institutions, where required by specific calls or contracts, the expenses for the stipulation of this policy are borne by the project funds.

Art. 9 – Selection Committee

The selection of the eligible candidates will be performed by a 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, and two researchers expert in the fellowship topic. The Committee Chairperson President and the Secretary are nominated in the appointment decree among the Committee members.

Art. 10 - Selection Procedure

The selection is based on qualifications, integrated, if needed, by an interview, to ascertain the research attitude of the candidates and their professional skills relevant to the topic of the fellowship. The Selection Committee will establish in advance the evaluation criteria for the qualifications and for the interview.

The admission to the interview will be notified in advance to all the eligible candidates, together with the score obtained in the qualifications evaluation. The notification will be sent either via telegram or via e-mail, whereas an e-mail address has been indicated by the candidate, with the request of an explicit acknowledgement by the candidate. For the interview, candidates must exhibit a valid identity document. Candidates who do not show up in the day of the interview are excluded from the selection. 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.

Art. 11 - Qualification evaluation and ranking

The general criteria for the evaluation of the scientific and professional qualification, with specific regard to those relevant to the fellowship topic, and the scores to be awarded will be decided by the Committee before examining the applications.

Evaluable qualifications are, among others: graduation grade, PhD, or, equivalently three years of documented research activity after graduation, relevance or research activity to the fellowship topic, master and specialization degrees, publications.

The Committee can award a total score of 100 points: up to 70 points for the qualifications evaluation and up to 30 points for the interview. In the qualification evaluation up to 40 points are reserved for the scientific career and production, and up to 30 are reserved for the length of the scientific career, where a higher score will be awarded to candidates with less years elapsed from the PhD. The Committee can establish a threshold score on the qualification evaluation for the candidate to be admitted to the interview.

After the qualification evaluation, if the Committee considers it appropriate to interview the eligible candidates, the notification for the interview will be sent at least 15 days before the established date. INAF will not refund any expenses incurred by the candidates to participate to the interview.

After each session, the Committee will compile a report.

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PEC: inafiasfpa@pcert.postecert.it

The Committee will nominate the winner, drawing up a ranking, with the scores resulting from the sum of the points obtained in the qualification evaluation and in the interview.

The ranking will be published on the official bulletin board of INAF-IASF di Palermo, via Ugo La Malfa, 153 Palermo, together with the Director approval decree.

In case of withdrawal of the winner, the research grant can be awarded to the next candidate in the ranking.

Art. 13 - Formalization of the fellowship

After compliance verification of the procedure and verification of the availability of funds, the Administration of INAF-IASF Palermo will summon the winner to sign a contract. The notification will report the start date of the fellowship.

Within ten days from the date of receipt of the aforementioned convocation, the winner has to declare formally his/her acceptance of the fellowship at the condition established by INAF-IASF Palermo. In case of withdrawal, a formal withdrawal declaration has to be provided within the same date. In this case the next ranking candidate will be declared as the winner.

In the formal acceptance declaration, the winner must declare, under his/her responsibility, that for the whole duration of the fellowship he/she will not receive any other salary or funding, except those awarded from Italian or foreign institutions aimed at supporting the research activity with stays abroad. If the holder of the fellowship interrupts his/her research activity without a justified reason or is responsible of severe faults, or proves him/herself to be not proficient in the fellowship topic, the fellowship can be revoked, after the issue of a proper Director decree.

Under no circumstances the signing of the contract starts a subordinate employment relationship or ensure any right to access to permanent INAF staff position.

Art. 14 – Fellowship obligations

The Director of INAF – Istituto di Astrofisica Spaziale e Fisica Cosmica di Palermo establishes the start date of the fellowship.

The holder of the fellowship has the following obligations:

- a) to sign the contract that regulates the collaboration to the research activity and anything else contemplated therein;
- b) to start the collaboration in due date, unless prevented by *force majeur* or exceptional circumstances;
- c) to carry on regularly the research activity for the entire duration of the fellowship;
- d) to comply with all the internal regulations of the INAF-IASF of Palermo and the other instructions given by the Director;
- e) to issue an activity report, countersigned by the scientific supervisor, to the INAF IASF Palermo Director at the end of the fellowship.

The holder of the fellowship cannot carry out any didactic activity. The fellowship can be temporarily suspended only in case of pregnancy, illness condition lasting more than one month, or other serious reason. INAF – IASF Palermo must receive a documented and timely request.

In case of withdrawal, the holder must send a forewarning of 30 days, which becomes effective either on the 1^{st} or on the 16^{th} of the month. If no notice is sent, the Administration can retain from the salary the amount corresponding to the forewarning period.

Art. 15 – Processing of personal data

According to Art. 13, par 1 of D.Lgs n. 196/2003 and the following modifications, personal data of the candidates are collected by Istituto di Astrofisica Spaziale e Fisica Cosmica di Palermo only for the aim of this selection and of the following employment agreement. These data are essential for the evaluation procedure. The same data can be shared with the Public administration involved in the juridical, economic and social security position of the fellowship holder. Art. 7 of the same law gives the holder the right to have access to his/her data and to correct, update, complete them as well as complete or delete wrong and incomplete data, or those collected not according to the law. The fellowship holder can use these rights towards the INAF - IASF Palermo Director, who is responsible for the processing of the data.

Art. 16 – Publication of this announcement

The notice of this announcement is e-mailed to the Astronomical and Astrophysical Observatories and to the scientific institutions. It is published on the INAF website (www.inaf.it), on the INAF - IASF Palermo website and on its official bulletin board. It is also published on the MIUR and EU websites.

Art. 17 - Referral rules

As applicable to the procedure for the awarding of research grants, the IASF-Palermo ensures compliance with the current rules on equal opportunities for men and women. For matters not covered by this call for applications, the INAF-IASF of Palermo will comply, where applicable by analogy, with the current legislation on public tenders.

Art. 18 – Responsible for the procedure

In accordance with the Law n 241 of Aug 7, 1990, the responsible for this selection procedure is the Director of INAF IASF Palermo.

Palermo, December 13, 2018

The Director Dr. Giancarlo Cusumano