



## **DECREE N. 06/16**

Selection procedure for one Post-Doc Research Fellowship: **"Emission at high and very high-energy from neutron stars"** 

#### THE DIRECTOR

- **Having seen** the Statute of the Istituto Nazionale di Astrofisica (INAF), adopted by INAF Board on March 7<sup>th</sup>, 2011, and entered into force on May 1<sup>st</sup>, 2011;
- **In accordance with** Italian Law n.240 dated December 30<sup>th</sup>, 2010, Article 22;
- **Having seen** INAF Regulations for the awarding of research fellowships approved by INAF Board on June 22, 2011, Resolution n. 06/11 and subsequent modifications and integrations;

#### DECREES

#### Art. 1 – Research project

A selection based on titles and qualifications, possibly integrated by an interview, is open to award one Post-Doc research fellowship, funded under the projects "Exploring the X-ray Transient and Variable Sky" (hereinafter referred to as "EXTraS") and "TECHE.it" and entitled "Emission at high and very high energy from neutron stars".

The awarded fellow will work under the supervision of Dr. Andrea De Luca and will carry out the following activities:

- Analysis of multiwavelength observations of neutron stars;
- Planning and implementation of X-ray observations of rotation-powered pulsars, to extend the available sample;
- Phenomenological characterization and modeling of the emission of rotation-powered pulsars from X-rays to high energy gamma-rays and selection of promising very high-energy emitters;
- Contribution to the EXTraS project: test and refinement of pipelines for the study and characterization of short-term variability in soft X-ray sources (both aperiodic and periodic); preparation of final products for the community.

#### Art. 2 – Requirements

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

- PhD degree in Astronomy or Physics or equivalent, awarded by an Italian university or by a foreign university;
- good command of the English language

Significant and documented experience with



- Analysis of X-ray observations of rotation-powered pulsars, in particular with XMM-Newton, Chandra, Suzaku, Swift;
- Implementation as a PI of X-ray observations of rotation-powered pulsars;
- astrophysics of rotation-powered pulsars;
- algorithms for temporal and spectral studies of soft X-ray sources;
- handling of large astronomical datasets;

will be considered as preferential qualifications.

#### Art. 3 – Application procedure

Applications must be submitted in English, in electronic form only (PDF), by e-mail to the following email address: <u>deluca@iasf-milano.inaf.it</u> (Maximum e-mail size: 18 MB).

Please quote "EXTraS-TECHE PostDoctoral Fellowship" in the e-mail subject.

An acknowledgement of receipt will be sent to the e-mail address of the candidate given in the application. The acknowledgement does not imply that the proposal has been accepted as eligible for the evaluation.

Applications are to be submitted by and not after 22 March, 2016 at 18:00 a.m. (CET). Late submissions will not be considered.

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.

# A) 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 above mentioned declarations will determine the exclusion from the selection procedure for incomplete application.

#### **B**) The following documents have to be submitted:

- Annex 1 "Application form";
- Annex 2 "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 fellowships hold in the past;
- copy of a valid identity document (ID card or passport);
- list of publications;
- any other qualification, working task, research activity for public and private institutions and publications that the applicant deems appropriate to submit.

# C. The applicant should also arrange to have up to two letters of reference by scientists familiar with his/her work, sent directly to the same e-mail address.



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 "ricercatori" 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 fellowship.

The grant cannot be held contemporarily 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 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-IASF Milano.

Retired persons are not eligible for Research fellowship.

Also excluded from participation are any person who has carried out Research fellowships 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 fellowship

The Research fellowship is awarded for 12 months. The fellowship is expected to begin on 2016, April 1 and will end on 2017, March 31. 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.

12-month extensions, up to a total duration of three years, may be possible depending on favourable opinion of the local coordinator of the EXTraS activities, Dr. A. De Luca and upon confirmation of funding. In accordance with Italian Law n. 240/2011 the duration of the fellowship, inclusive of possible renewal, will not exceed four 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 INAF-IASF Milano.

#### Art. 7 – Salary amount

The gross annual salary will be 28,000.00 (Twenty-eight-thousands/00) Euro). This amount is net of burdens to be charged to INAF-IASF Milano, social charges and health coverage and will be paid in deferred monthly instalments.

INAF/IASF Milano provides accidents and civil liability insurance cover through the EXTraS grant support.

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 performed by a Selection Committee, appointed by the Director of INAF-IASF Milano and composed of 3 members.

The selection is based on titles and qualifications possibly integrated by an interview. The Selection Committee can establish a short list of the eligible applicants to be interviewed, on the basis of titles and qualifications and documented experience in scientific or technological activities on the specific subject of the research fellowship. All the stages of the selection procedure (e.g. meetings of the Selection Committee, interviews and so on) can be performed also using electronic devices for the communications. Applicants selected for the interview will be summoned with 15 days notice by e-mail. The e-mail will also contain 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.

At the end of the selection procedure the Selection Committee will draw up the ranked list. The approval decree of the selection procedure and the ranked list will be published on the INAF/IASF Milano web site: http://www.iasf-milano.inaf.it

#### Art. 9 – Awarding of the fellowship

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

The awardee must declare her/his acceptance of the research grant by email to <u>deluca@iasf-milano.inaf.it</u> within 15 days from receipt of the notification. The declaration will also state that she/he is not subject to any of the exclusion conditions listed in article 4 of this Call.

In case no declaration is received, the candidate is considered as withdrawn and thus excluded. The Selection Committee can then move down the ranking and repeat the procedure with the second-ranked candidate, and so on until the fellowship is accepted.

Under no circumstances the signing of the contract starts 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 at the date due as for the contract at INAF-IASF Milano unless prevented by force majeure or exceptional circumstances, of which the Director of INAF-IASF Milano must be timely informed;
- will carry out her/his research activities under the supervision of Dr. Andrea De Luca, 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 Dr. Andrea De Luca and will be transmitted to the Director of INAF-IASF Milano. Approval failing, duly reasoned by the supervisor, will give INAF-IASF Milano 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-IASF Milano is entitled to retain or request the reimbursement of the salary amount corresponding to the notice time-span she/he has failed to send.

The holder of the fellowship 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 Dr. Andrea



De Luca, eventually shows evident lack of skills at the planned research activities, will incur the termination of the contract.

Temporary suspensions of the research fellowship 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 fellowship must be proved and certified, and promptly sent to the Director of INAF-IASF Milano.

#### **Art. 11 – Proceeding Responsible**

The Responsible of this Job announcement processing is: Dr. Andrea De Luca (e-mail: deluca@iasf-milano.inaf.it).

#### Art. 12 – Applicable regulation

INAF-IASF Milano 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, the INAF-IASF Milano shall act in compliance with the regulations in force concerning Italian public selection procedures, when applicable by analogy.

Milano, February 23rd, 2016

Horano

Dr. Patrizia Caraveo



## **ANNEX 1: APPLICATION FORM**

(TO BE SIGNED AND SCANNED INTO A PDF FILE TO BE E-MAILED TO THE ADDRESS PROVIDED BELOW)

To: Dr. Andrea De Luca INAF-IASF Milano deluca@iasf-milano.inaf.it

#### I, THE UNDERSIGNED,

#### I, THE UNDERSIGNED,

having read the Call for applications for the appointment of one research fellowship entitled: "Emission

#### at high and very high-energy from neutron stars"

#### REQUEST

to apply for the above mentioned fellowship, and to this end, aware that false declarations are punishable by Italian law and that this Administration will carry out random checks on the accuracy of the declarations made by candidates,

#### DECLARE

under my own responsibility

that I hold the following Research Doctorate	(PhD)	awarded
by	on	date
Title of thesis		.Supervisor:;

□ that I have a professional level of knowledge of English language;

- □ that I am aware of the restrictions described in Article 4, of the Call for applications for this research fellowship;
- □ that I have never received a research award as per art. 22, Italian Law 240/2010;
- $\Box$  that I have previously received a research awards as per art. 22, Italian Law 240/2010 and, in particular I have been the recipient of<sup>1</sup>:
  - a research fellowship entitled .....,

<sup>&</sup>lt;sup>1</sup> Indicate the number of months for which the award was used and the name of the institution granting the award, e.g. INAF-Observatory of Turin, please provide details of each award, for example, if you have had two awards of 24 months each at the same institution indicate these as two separate awards on two different lines.



	beginning	ending	total months	
٠	a research fel	lowship entitled		
	at (name of th	ne institution)		,
	beginning	ending	total months	
٠	a research fel	lowship entitled		
	beginning	ending	total months	

- $\Box$  that I am not a retired person;
- □ that I am aware that, under art. 22 Italian Law 240/2010, the research fellowship:
  - cannot be held contemporarily with attendance at academic courses, "laurea specialistica" academic courses, and "laurea magistrale" academic courses, as well as with attendance at PhD courses with fellowship;
  - cannot be held contemporarily 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;
  - cannot permit aggregation of income from working activities, also part-time, carried out continuously.
- that I wish to receive any communication relating to the selection at the following address and that I will give due notice of any change of address:
  Email address:

Email address: ....

To be attached to this form:

- Attachment 2 "Curriculum vitae", **signed and dated** by the applicant, providing evidence of possession of the skills required to carry out the research and including a list, if applicable of grants and fellowships hold in the past;
- copy of a valid identity document (ID card or passport);
- list of publications;
- any other qualification, working task, research activity at public and private institutions and publications that the applicant deems appropriate to submit;

#### To be sent separately, up to two reference letters by scientists familiar with the applicant's work.

The undersigned declares his/her consensus for his/her personal data to be treated respecting the Italian Law "Decreto Legislativo" N. 196/2003 and subsequent modifications and integrations, in order to fulfil the procedures necessary for the present call.

Date

Signature



# ANNEX 2 CURRICULUM VITAE

I, the undersigned, declare that I am aware that false declarations are punishable by Italian law and that INAF Administration will carry out random checks on the accuracy of the declarations made by candidates

### DECLARE UNDER MY OWN RESPONSIBILITY

## THAT THE CONTENT OF THE ATTACHED "CURRICULUM VITAE" IS TRUE

Date

Signature