

Decreto n. 61/2014

*Selection procedure based on qualification and possible interview for the awarding of one fellowship entitled: “Study and design of digital signal processing systems for radioastronomy”*  
CUP 31J12000290006

**THE DIRECTOR OF INAF ASTROPHYSICAL OBSERVATORY OF ARCETRI**

<b>Having seen</b>	the Statute of the Istituto Nazionale di Astrofisica (INAF), adopted by INAF Administrative Council on 7 March 2011 and entered into force on 1 May 2011;
<b>having seen</b>	the DL 213 dated 31 December 2009;
<b>considering</b>	the request, prot. no. 974/2014 del 08/09/2014, to issue an announcement of competition for the award of a fellowship regarding “ <b>Study and design of digital signal processing systems for radioastronomy</b> ” under the responsibility of dr. Giovanni Comoretto, associate astronomer at INAF – Osservatorio Astrofisico di Arcetri;
<b>given</b>	the availability of finance form fund CRAM 1.05.02.66 (ref. Franco Mantovani) CUP 31J12000290006;

**DECREES**

**Art. 1 – Research project**

A selection based on titles and qualifications, with the possibility of an interview is open to award one fellowship funded under the FP7 Radionet3 grant CRAM 1.05.02.66 (ref. Franco Mantovani) CUP 31J12000290006 (hereafter referred to as “Radionet”).

The fellowship is entitled “**Study and design of digital signal processing systems for radioastronomy**”.

Within the FP7 Radnonet3 project, the awarded fellow is expected to carry out the following activities:

- study and design of back-end electronics for the processing and analysis of wideband radioastronomic signals, based on field programmable logic array (FPGA) devices
- test of digital signal processing designs using the digital processing platform “Uniboard”

The successful applicants will perform research at INAF- Osservatorio Astrofisico di Arcetri under the supervision of Dr. Giovanni Comoretto, in collaboration with the other members of the Uniboard Joint Research Activity research team.

### Art. 2 – Requirements

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

- Degree in Astronomy, Astrophysics and Space Science, Physics or Engineer’s degree which would formally entitle for the admission to a doctorate, awarded by an Italian university or by a foreign university, awarded by an Italian or by a foreign University;
- A base knowledge of digital signal processing techniques, certified by appropriate academic studies or documented research or professional activity

A good knowledge of the English language is required.

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

- Research experience in experimental radioastronomy
- Knowledge of FPGA design techniques
- Independent and collaborative research skills.

### Art. 3 – Application procedure

Applications must be submitted in English as closed envelope by “Raccomandata A/R”, authorized carrier (ex. DHL, FedEx, UPS, etc.) or, in person, to the Protocol Office of INAF-Osservatorio Astrofisico di Arcetri, Largo Enrico Fermi 5, 50125 Firenze (ITALY). Alternatively, the application can be submitted using PEC (Posta Elettronica Certificata: **no** ordinary e-mail) to the following PEC address: **[inafoarcetri@pcert.postecert.it](mailto:inafoarcetri@pcert.postecert.it)**.

Applications are to be submitted by and not after **October 6<sup>th</sup>, 2014**. Late submissions will not be considered.

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

The application must be delivered reporting on the envelope or the PEC (Posta Elettronica Certificata) subject **“Application for Radionet Fellowship position at INAF-Arcetri – DD. n.61/2014.**

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 above mentioned 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 1);
- EU citizens and non-EU citizens residing outside Italy, if successful, must produce originals or suitably certified copies of academic qualifications obtained outside Italy

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 in subject and including a list, if applicable, of grants and fellowships/fellowships held 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.
- Signed list of all documents presented

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 “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 is compatible to the attendance to a PhD course without a grant, and to specialization post-university courses, previous authorization of the scientific responsible.

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- Osservatorio Astrofisico di Arcetri.

Retired persons are not eligible for fellowship.

#### **Art. 5 – Duration of the Fellowship**

The fellowship is expected to begin as soon as possible but not later than November 2014, for a period of 12 months, with a possible extension depending on performance and funding availability. 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.

#### **Art. 6 – Host Institution**

The fellow will carry out the research at INAF-Osservatorio Astrofisico di Arcetri – Largo Enrico Fermi, 5 – 50125 Firenze (Italy).

#### **Art. 7 – Salary amount**

The gross annual salary will be 28.000,00 (Twenty eight thousand/00) Euro. This amount is net of burdens to be charged to INAF-Arcetri, social charges and will be paid in deferred monthly instalments. The fellowship will not entail medical insurance, 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 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, based on qualifications, will be performed by a Selection Committee appointed by the Director of INAF-Osservatorio Astrofisico di Arcetri and is composed of three members, including the researcher in charge of the scientific part of the Radionet JRA project, Dr. Giovanni Comoretto.

The selection is based on 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 qualifications and documented experience in scientific 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 with acknowledgement of receipt, containing the individual score for qualifications.

The total ranking score is 100 points of which:

- up to 20 points for the degree thesis
- up to 20 points for publications on topics related to the subject of the call
- up to 40 points for past experience in radioastronomic instrumentation design and digital signal processing
- up to 20 points 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 following website: <http://www.arcetri.astro.it>

### Art. 9 – Awarding of the fellowship

The highest ranked candidate will receive written notification of award of the research fellowship, which will be anticipated by e-mail to assure a rapid process.

**Within 20 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.

The declaration can be anticipated by electronic mail.

**If the candidate does not provide declaration of acceptance within a time limit of 20 days, she/he will surrender his/her entitlement to the research fellowship 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

### **Art. 10 – Fellowship obligations**

The holder of the fellowship:

- will start the research activity at the date due as for the contract at INAF- Osservatorio Astrofisico di Arcetri, unless prevented by force majeure or exceptional circumstances, of which the Director of INAF- Osservatorio Astrofisico di Arcetri must be timely informed;
- will carry out her/his research activities under the supervision of the INAF scientist in charge of the Science Working Group of the Radionet project, Dr. Giovanni Comoretto, who will also monitor the fellow's progress;
- is required to issue an activity reports when requested by the director and in any case at the end of the first year. 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-Arcetri. Approval failing, duly reasoned by the scientist in charge, will give INAF-Arcetri 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-Arcetri 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 fulfill requirements or, according to the evaluation of the local coordinator of the Radionet project, Dr. Giovanni Comoretto, 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 fellowship must be proved and certified, and promptly sent to the Director of INAF- Arcetri.

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

The Responsible of this Call proceedings is Dr. Serena Donati (email: [donati@arcetri.astro.it](mailto:donati@arcetri.astro.it))

### **Art. 12 – Applicable regulation**

The INAF-Osservatorio Astrofisico di Arcetri 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- Osservatorio Astrofisico di Arcetri 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, according with art. 8 of INAF rules and regulations on "Borse di studio", on the INAF- Osservatorio Astrofisico di Arcetri website <http://www.arcetri.astro.it/opportunita-di-lavoro> and on the INAF website: <http://www.inaf.it>

Firenze, September 08<sup>th</sup> 2014

Dr. Filippo Mannucci

**ANNEX 1: APPLICATION FORM**

**(to be signed and sent to the address provided below)**

To:

INAF - Osservatorio Astrofisico di Arcetri

Largo E. Fermi 5

50125 Firenze

Italy

I, THE UNDERSIGNED,

(Forename(s)).....

(Surname).....

Place of birth (Town/State) .....

Date of birth (dd/mm/yy) .....

Nationality .....

Gender .....

Permanent residence address (number/street/town/postal code/Country):

.....

Email address: .....

agree to the processing of my personal data, in accordance with Italian Leg. Decree n. 196/2003, for the purposes of the present selection procedure.

I, THE UNDERSIGNED,

having read the Call for applications D.D 61/2014 for the appointment of one fellowship entitled: “Study and design of digital signal processing systems for radioastronomy”.

REQUEST



to apply for the above mentioned fellowship, and to this end, aware that false declarations are punishable by law under art. 76 of Italian Presidential Decree n. 445/2000 and that this Administration will carry out random checks on the accuracy of the declarations made by candidates,

DECLARE

under my own responsibility and in accordance with articles 46 and 47 of Italian Presidential Decree 445/2000,

- that I hold the following Master Degree ..... awarded by ..... on date .....  
Title of thesis .....;
- that I hold the following educational qualifications....., awarded by ....., Date.....;
- that I have a professional level of knowledge of English language;
- that I have ..... years of documented experience in scientific or technological activities;
- that I have a base knowledge of digital signal processing techniques, certified by .....
- that I am aware of the restrictions described in Article 4, of the Call for applications for this fellowship;
- that I have never received a research award as per art. 22, Italian Law 240/2010;
- 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 fellowship entitled ....., at (name of the institution)....., beginning.....ending.....total months .....
  - a research fellowship entitled ....., at (name of the institution).....,

<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 .....

- that I am not a retired person;
- that I am aware that the 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:

Address (number/street/town/postal code/Country):  
.....

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;
- copy of the degree certificate or of the equivalent foreign academic qualification.

Date

Signature

\_\_\_\_\_

\_\_\_\_\_

**ANNEX 2**

**CURRICULUM VITAE**

I, THE UNDERSIGNED,

aware that false declarations are punishable by law under Article 76 of Presidential Decree no. 445 of 28th December 2000, and that this Administration will carry out random checks on the accuracy of the declarations made by candidates

DECLARE UNDER MY OWN RESPONSIBILITY

and in accordance with Articles 46-47 of Presidential Decree no. 445 of 28<sup>th</sup> December 2000 (“SELF-EXECUTED CERTIFICATE AND SELF-EXECUTED AFFIDAVIT”)

THAT THE CONTENT OF THE ATTACHED “CURRICULUM VITAE” IS TRUE

Date

Signature

\_\_\_\_\_

\_\_\_\_\_