

D.D. n. 06 date 30/01/2014

Bando 2014-03-AR

**Subject: Selection procedure based on qualification and possible interview for the awarding of one research fellowship entitled: "Study of the filamentary nature of the star forming phase of the interstellar medium"**

**NATIONAL INSTITUTE FOR ASTROPHYSICS**  
Institute for Space Astrophysics and Planetology

The Director

- **In accordance with** Law n. 240 dated 30 December 2010 of which art. 22 in particular;\_\_\_
- **In accordance with** the Provisions for the assignment of research grants approved by INAF Administrative Council on 22<sup>nd</sup> June 2011;
- **In accordance with** the request by dr. Sergio Molinari, scientific leader for Via Lactea and HiGAL projects;
- **Ascertained** that financial coverage of the grant is granted within the two CRA 1.05.02.89 "VIALACTEA: The Milky Way as a star formation engine" (hereinafter referred to as "VIALACTEA"), European Commission Grant Agreement n. 607380 and CRA 1.05.04.11.02 ASI "HiGAL" contract on chap. 1.05.08 entitled: "Fellowships and Research Grants" of 2014 budget;;

**DECREES**

**Art. 1 – Research project**

A call is open call for the selection procedure on the basis of candidates' qualifications, possibly integrated by an interview, for the assignment of one "Post-Doc" research grant of the duration of *one year, extensible up to three years*, entitled: **"Study of the filamentary nature of the star forming phase of the interstellar medium"**.

Research will be carried out at INAF Istituto di astrofisica e Planetologia Spaziali (IAPS) in the framework of the Italian activities for the exploitation of the HiGAL - Herschel Infrared GALactic plane survey data. The successful candidate will work in collaboration with the IAPS staff on the following activities:

- Research activity on galactic star formation, focused on the analysis of the compact structures, i.e. YSOs and star forming clumps in general, using the Galactic Plane continuum surveys. More in particular, with reference to the Herschel HiGAL survey, production of source extraction software tools, based on pre-existing prototypes, with the aim of improving the quality of the present survey catalogues.
- The activity will include the study of the filamentary nature of the cold, dense and potentially star-forming phase of the ISM. The work will be focused on the Identification and characterization from the morphological and physical point of view the diffuse filamentary structures where star-forming clumps are hosted. The activity will aim at providing a catalogue of all Galactic Plane filamentary structures.

The candidate will fulfil the requirement of experience in the field of infrared/submillimeter astrophysics and in star formation/interstellar medium studies. Further questions on science can be sent to Sergio Molinari (e-mail: [sergio.molinari \[at\] iaps.inaf.it](mailto:sergio.molinari[at]iaps.inaf.it)).

**Art. 2 – Requirements for the participation**

The participation to the selection is reserved for Italian and foreign citizens holding the following mandatory minimum requirements:

- PhD degree either in Physics or Astronomy, or equivalent degree, issued by an Italian (or foreign) Advanced Studies Institute or University.

Or

1. degree either in Physics or Astronomy, issued according to the previous Italian University regulations or degree in Physics or Astronomy, which would formally entitle to the admission to a

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

- knowledge of astronomical images analysis tools.
- Advanced level knowledge of source extraction and photometry tools.
- Good knowledge of the English language

### Art. 3 – Application procedure

Applications must be submitted in English, by e-mail with acknowledgement of receipt, to the following email addresses: [area.concorsi\[at\]iaps.inaf.it](mailto:area.concorsi[at]iaps.inaf.it).

Applications are to be submitted by and not after **midday (UT) on 12/03/2014** Late submissions will not be considered.

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

The applications must be delivered reporting in the e-mail subject "Application for VIALACTEA Postdoctoral fellowship 1 at INAF-IAPS".

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

- 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)

in addition

- 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 and including a list, if applicable, of grants and fellowships held in the past and a statement of research interests;
- 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.

Applicant should also arrange for two signed letters of reference by persons familiar with her/his work who shall send them directly and within the deadline by e-mail with acknowledgement of receipt to the email address [area.concorsi\[at\]iaps.inaf.it](mailto:area.concorsi[at]iaps.inaf.it)

Applicants are admitted for selection with reservation and may – at any time – be notified of exclusion from the selection procedure for one of 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 public research 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. For employees of the Italian Public Administration (Italian State) compulsory unpaid leave of absence is foreseen.

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- Istituto di Astrofisica e Planetologia Spaziali (IAPS)

Retired persons are not eligible for Research fellowships.

Also excluded from participation is 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. When formally accepting the grant, the successful candidate will issue a declaration of absence of inadmissible cumulating of grants/fellowships.

#### **Art. 5 – Duration of the Research fellowship**

The Research fellowship is expected to begin on 01/05/2014. 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.

The fellowship is initially awarded for 12 months and can be extended for a total duration of 3 years, depending on the favourable opinion of the scientific leader of the project, Dr. Sergio Molinari, and on funding availability.

#### **Art. 6 – Host Institution**

Host institutions of the grant is INAF - Istituto di Astrofisica e Planetologia Spaziali (IAPS). The successful candidate will have to travel on duty abroad also in non-EU countries

#### **Art. 7 – Salary amount**

The grant is worth 28,000.00 (twenty-eight-thousand) Euros gross per year. This amount is net of burdens to be charged to INAF-IAPS, social charges and health coverage and will be paid in deferred monthly instalments.

Applicable fiscal rules are the provisions of art. n. 4 of Italian law n. 476/1984 and subsequent modifications and integrations. Applicable social security rules are art. n. 2, paragraph 26 and following paragraphs of the Italian law n. 335/1995 and subsequent modifications and integrations. Applicable rules for obligatory maternity leave are provided in the Decree of the Ministry of Labour and Social Security dated 12 July 2007, published in the "Gazzetta Ufficiale" n. 247 dated 23 October 2007. Applicable rules for sick leave are provided by art. n. 1, paragraph n. 788 of Italian law n. 296 dated 27 December 2006 and subsequent modifications. During the period of obligatory maternity leave the allowance paid by INPS (Italian national institute for social security) according to art. n. 5 of the above Decree dated 12 July 2007 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.

As for third party liability, the grant holder will be covered by insurance policy drawn up by INAF. This insurance policy will not cover the civil liability of the grant holder towards INAF.

Accidents insurance will be paid by INAF-IAPS in favour of the fellow, to provide coverage for work accidents, occupational diseases and invalidity.

#### **Art. 8 – Selection Committee and selection procedure**

The selection of eligible candidates will be performed by a Selection Committee appointed by the Director of INAF-IAPS. The Selection Committee is composed of 3 members, from both Italian and foreign research staff, including also University staff, with expertise in the research field of the position offered in this announcement, and will include the scientific leader of the project, Dr. Sergio Molinari. According to the law in force, the composition of the Selection Committee should comply with gender balance. The president of the Selection Committee is nominated in the appointment decree and is chosen between the Committee members. In the decree the Selection Committee Secretary is also appointed.

The selection is based on qualifications possibly integrated by an interview. To be admitted to the interview, candidates must exhibit their identity documents.

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 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 with acknowledgement of receipt, containing the individual score for qualifications.

The total ranking score is 100 points, of which 70 points is the maximum score for qualifications and 30 points is the maximum score 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.iaps.inaf.it/work-with-us/>

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

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

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 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 per the contract at INAF-IAPS, unless prevented by force majeure or exceptional circumstances, of which the Director of INAF-IAPS must be timely informed;
- will carry out her/his research activities under the supervision of the scientist in charge of the project, Dr. Molinari, who will also monitor the fellow's progress;
- 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 - IAPS. Approval failing, duly reasoned by the scientist in charge, will give INAF- IAPS 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-IAPS 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 activities, Dr. S. Molinari, 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-IAPS.

#### Art. 11 – Proceeding Responsible

In accordance with Art. 8, paragraph 3 of INAF Provisions on the assignment of research grants, Mrs. D. Segatori (daniela.segatori@iaps.inaf.it). is the responsible of the competition proceedings relevant to this competition announcement.

#### Art. 12 – Applicable regulation

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

30/01/2016

*The Director*  
Dr. Pietro Ubertini



## ANNEX 1

### APPLICATION FORM

To  
the Director of INAF IAPS  
Via fosso del Cavaliere 100  
00133 ROMA

I, THE UNDERSIGNED,

(Forename(s)) .....

(Surname).....

Place of birth (City/State/Country) .....

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. 06 date 30/01/2014 for the appointment of one research fellowship entitled: *"Study of the filamentary nature of the star forming phase of the interstellar medium"*.

### REQUEST

to apply for the above mentioned fellowship, and to this end, being aware that false declarations are punishable by 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 .....

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 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;

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 .....  
at (name of the institution).....  
beginning.....ending.....total months .....
- a research fellowship entitled .....  
at (name of the institution).....  
beginning.....ending.....total months .....
- a research fellowship entitled .....  
at (name of the institution).....  
beginning.....ending.....total months .....

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:

Address (number/street/city /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 held 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.

Date

Signature

<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-IAPS, 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.



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**ANNEX 2**

**CURRICULUM VITAE DECLARATION**

I, THE UNDERSIGNED,

aware that false declarations are punishable by 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 THE CONTENT OF THE ATTACHED "CURRICULUM VITAE" IS TRUE

Date

Signature

\_\_\_\_\_

\_\_\_\_\_