



***D.D. n. 73/2013***

***Selection for one research fellowship on: “Weak Gravitational Lensing with Euclid”***

## **The Director**

- ***In accordance with*** Law n. 240 dated 30 December 2010 of which art. 22 in particular;
- ***In accordance with*** Law n. 183 dated 12 November 2011 of which art. 15, paragraph 1 in particular;
- ***In accordance with*** the Provisions for the assignment of research fellowships approved by the INAF Administrative Council on 22<sup>nd</sup> June 2011;
- ***In accordance with*** the request by dr. Roberto SCARAMELLA, OAR scientific responsible for the activities of the research project: Euclid phase B2/C;
- ***Granted*** that financial coverage of the fellowship is guaranteed by available funds allocated to CRA 1.05.04.37.04 of the 2013 budget;

## ***DECREES***

### **Art. 1- Research Project**

An open call for the selection of a one year (renewable) research fellowship on the topic: **“Weak Gravitational Lensing with Euclid”**. The selection will be based upon education, experience and curriculum of the applicants. Interviews may also be organized.

Here is a list of the scientific topics:

- weak lensing data analysis for ground-based and space telescopes: Euclid case and development of associated analysis software;
- clusters as cosmological tool;
- mass distribution reconstruction of galaxy clusters using gravitational lensing.

For further information, please contact dr. Roberto Scaramella (e-mail: [roberto.scaramella@oa-roma.inaf.it](mailto:roberto.scaramella@oa-roma.inaf.it)).

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

Participation to the selection is reserved to Italian and foreign citizens having the following mandatory requirements:

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

Or

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- degree in Physics or Astronomy issued according to the previous Italian University regulations or degree in Physics or Astronomy either “specialistica” or “magistralis” (new Italian University regulations) or equivalent degree issued by an Italian or foreign Advanced Studies Institute or University, together with at least three years of documented experience in scientific activities.

Specific expertise will be considered valuable, such as a significant and documented experience in the:

- 1) development of simulations and data analysis in the field of weak gravitational lensing;
- 2) expertise in astronomical images manipulation;
- 3) knowledge of programming languages C, C++, IDL.

A good knowledge of English is required.

### **Art. 3 – Application**

Applications should follow the attached application model (Attachment 1), with the addition of the date and the signature of the candidate.

Applications, to which the requested documentation must be attached, must be submitted either by hand delivery to the Astronomical Observatory of Roma from 9:00 am until 12:00 am, or sent by express courier or by registered letter with acknowledgement of receipt. Applications must be addressed to the Director of INAF-Osservatorio Astronomico di Roma, Via Frascati n. 33, 00040 Monte Porzio Catone (RM), Italy.

Applications should be submitted by July 3rd, 2013.

On the application's envelope the following must be clearly quoted: applicant's name, family name and address, and the caption: “Research fellowship – Weak Gravitational Lensing with Euclid”.

Incomplete applications will not be considered for the selection procedure.

Applications without the applicant's signature will be excluded from the selection procedure.

Applications which are inconsistent with the attached form will be excluded from the selection.

The following material should be attached to the application:

1. Curriculum vitae et studiorum (CV) of the candidate, including a list of positions and fellowships hold in the past, if applicable;
2. list of scientific publications;
3. non-Italian citizens should attach copies of their University degrees, including a list of exams and the degrees' final marks, or copies of the equivalent foreign degrees;
4. a list of all attached documents, in which the number of published papers is specified;
5. optionally: two letters of reference sent directly to the same address or by e-mail to [roberto.scaramella@oa-roma.inaf.it](mailto:roberto.scaramella@oa-roma.inaf.it);
6. a personal Statement (valid as self-certification) specifying that:
  - the candidate has obtained a University degree;
  - the candidate has a PhD degree, and any other specialization degree or certificate of attendance to post-degree specialization courses both in Italy or abroad, and a statement concerning any research activities which were carried out at private or public institutes,



either under contracts, fellowships or fellowships both in Italy and abroad or any working tasks that the candidate deems appropriate to submit.

The above self-certification must be consistent with the attached form format (Attachment 2), and must be dated and signed by the applicant, and a copy of a valid identity document must be attached. In using self-certification the candidate must list the submitted qualifications with details such as enable possible verification by the Observatory's Administrative Office.

#### **Art. 4 – Incompatibility**

Research fellowships cannot be held by INAF employees holding both permanent and nonpermanent contracts, and by regular employees of Institutes listed in article 22, paragraph 1 of Law n. 240/2010.

The fellowship cannot be held contemporarily with attendance of degree classes, (both “laurea specialistica” and “laurea magistrale”, PhD with fellowship). For Italian civil servants, a compulsory unpaid leave of absence is foreseen.

The fellowship cannot be held contemporarily with other fellowships of any kind, except those awarded with the aim of integrating the training or research activity of the fellowship holder with a stage abroad.

Aggregation of income from working activities, also part-time, carried out continuously is not allowed. Instead, a limited amount of self-employed, occasional work is compatible with the fellowship, unless it either hinders or delays the research activity carried out for INAF.

This must be authorized in advance by the Director of the Institute where the research activity of the fellowship is carried out.

When formally accepting the fellowship, the successful candidate will have to state there are no other incompatible grants.

#### **Art. 5 – Host institution and duration of the fellowship**

This is a one-year fellowship, which may be extended, depending on the positive opinion of the P.I. of the project and on funding availability.

In accordance with Law n. 240/2011 the duration of the fellowship, will not exceed four years, with the exclusion of the period in which the fellowship is held in coincidence with attendance of a PhD course.

Host institution of the fellowship is: INAF – Osservatorio Astronomico di Roma, via Frascati 33, 00040 Monte Porzio Catone (RM).

#### **Art. 6 – Salary**

The fellowship is worth 28.000,00 (twentyeightthousand/00) Euros gross per year. This amount is net of burdens, to be charged to INAF-Osservatorio Astronomico di Roma, and will be paid in monthly installments.

For applicable tax rules, please see artt. n. 4 of Italian law n. 476/1984 and subsequent modifications and integrations.

Applicable social security rules are described in 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.



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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 fellowship.

The period of obligatory maternity leave will not contribute to the duration of the fellowship foreseen by the contract.

Insurance coverage against accidents must be personally provided by the fellowship holder and the insurance policy documents must be produced when formally signing the contract.

### **Art. 7 – Selection Committee**

The selection of eligible candidates will be made by a Selection Committee appointed by the Director of INAF-Osservatorio Astronomico di Roma.

The Selection Committee is composed of three 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 P.I. of the project.

According to law, the composition of the Selection Committee should comply with gender balance. The president of the Selection Committee is appointed with a decree, and is chosen between the Committee members. In the decree, a Secretary is also appointed.

### **Art. 8 – Selection procedure**

The selection is based on qualifications, and possibly an interview. The total ranking score established by the Selection Committee is 100 points, of which 50/100 is the maximum score for qualifications and 50/100 is the maximum score for a possible interview.

Evaluation criteria will be defined in advance, and qualifications will be evaluated before the possible interview.

The Selection Committee shall rank eligible applicants to be interviewed.

The interview can also be held by teleconference.

Selected candidates will be advised by e-mail at least 15 days in advance.

The approval decree of the selection procedure, with the ranking list, shall be notified by posting on the Notice Board of the Observatory and on the website of the Observatory [www.oa-roma.inaf.it](http://www.oa-roma.inaf.it).

In case of withdrawal of the fellowship winner, the fellowship shall be awarded to the next eligible candidate in the ranking list.

### **Art. 9 – Contract**

Within 10 days from the receipt of the formal notification of the award, the successful candidate will provide a formal declaration of acceptance of the research fellowship without reservation and under the conditions prescribed in the contract, which shall be signed on the date and place established by the Observatory. The successful candidate will also declare that he/she is not subject to any of the exclusion conditions listed in Article n. 4 of this announcement.

Within the same time limit of ten days, in case of withdrawal, the winner is bound to provide a formal declaration of withdrawal to the Astronomical Observatory of Rome.



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

The fellowship holder is bound to draw up an insurance policy against accidents at work prior to starting his/her research activities, otherwise the fellowship will be revoked.

As for third-party civil liability, the fellowship holder will be covered by insurance policy drawn up by INAF. The policy does not cover civil liability of the fellowship holder towards INAF.

The Director of the Observatory has appointed dr. Roberto SCARAMELLA as scientific leader/tutor of the fellowship holder. His specific task is to supervise and coordinate the fellowship holder's research activity.

The fellowship holder is bound to issue periodical activity reports. The issuing frequency will be established in the contract. The activity reports will be subject to approval from the scientific leader, and will be transmitted to the Director of the Astronomical Observatory of Rome. If the P.I. does not approve the reports, this will give the Institute the right to terminate the contract.

In case of contract breach, the fellowship holder is bound to send a written communication with 30 day's notice. The notice starts from day 1 or day 16 of each month. In case of lack of notice, the Institute has the right to retain or request the reimbursement of the salary amount corresponding to the notice time-span which the fellowship holder failed to communicate. The next eligible applicant in the ranking list is entitled to receive the remaining amount of the fellowship salary, after drawing up the contract.

#### **Art. 10 – Starting date and duties**

The starting date of the fellowship is established by the Director of INAF-Astronomical Observatory of Roma in the notice of summons for drawing up the contract. Expected starting date of the fellowship is September, 1<sup>st</sup> 2013.

The fellowship holder must fulfill the following obligations:

- a) sign in advance the contract governing collaboration to the planned research activity project, and anything else foreseen in the contract;
- b) start research activity at the date due as by the contract at the INAF-Astronomical Observatory of Rome, unless prevented by motivated temporary hindrance, of which the Observatory must be timely informed;
- c) to carry out research activity for the whole duration of the fellowship regularly and continuously;
- d) comply with the rules and regulations of the Observatory, and with the instructions of the Director and of the scientific leader of the project;
- e) submit periodical reports on research activity to the Director of the Observatory after approval from the P.I.

The fellowship holder who, after having started the planned research activity, does not carry out his/her work regularly and without interruptions for the duration of the fellowship without producing justified reasons, or lacks repeatedly to fulfill requirements or, according to the evaluation of the scientific leader, eventually shows evident lack of skill in the research activity, will incur termination of the contract and consequent deprivation of the fellowship after justified decision of the Director.



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The fellowship holder will be informed of the possible start of administrative proceedings for terminating the contract, and he/she will be allowed to submit his/her own reasoned reply on the matter to the Director of the Observatory in writing.

The fellowship holder will be informed by reasoned notice both in case the administrative proceedings are filed away without further consequence, and in case of actual decision to terminate the contract.

Temporary suspensions of the research fellowship are justified only if the absence is due to pregnancy and post-natal leave, or to 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 Observatory.

#### **Art. 11 - Procedure Responsible**

In accordance with Art. 8, paragraph 3 of INAF Provisions on the assignment of research fellowships, Mr. Danilo ANTONELLI is the responsible of the competition procedures relevant to the present announcement.

#### **Art. 12 - Publicity**

This announcement shall be electronically forwarded to Astronomical and Astrophysical Observatories and to scientific institutes in the field of interest. The announcement will be posted on the websites of INAF ([www.inaf.it](http://www.inaf.it)) and of the Astronomical Observatory of Roma ([www.oa-roma.inaf.it](http://www.oa-roma.inaf.it)).

#### **Art. 13 – Applicable regulations**

The Astronomical Observatory 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 Observatory shall act in compliance with the regulations in force concerning public selection procedures, when applicable by analogy.

Monte Porzio Catone, June, 7<sup>th</sup> 2013

THE DIRECTOR  
Dr. Fabrizio FIORE



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## ATTACHMENT 1

### APPLICATION FORM FOR PARTICIPATION TO THE SELECTION

To the Director

INAF-Osservatorio Astronomico di Roma

Via Frascati, 33

00040 Monte Porzio Catone (RM), Italy

The undersigned (Forename(s))..... (Surname).....

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

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

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

E-mail:.....

Hereby applies to participate to the selection for the appointment of one research fellowship entitled: "Weak Gravitational Lensing with Euclid".

Under her/his personal responsibility the undersigned declares:

a) her/his nationality is: .....

b) to enjoy civil and political rights of the State of which she/he holds citizenship;

c) not to have been in the past or not to be at present under any penal sentence (if liable, please specify) .....

d) to hold the following educational qualifications: .....

e) research fellowships and/or fellowships hold in the past (length and host Institution): .....

f) to be presently holding the following research fellowship or fellowship (length and host Institution): .....

The following documents are attached:

1. curriculum vitae et studiorum, in which also past research fellowships or fellowships are listed;

2. list of publications available on the web;

3. any work or publications which is not available on the web which might be useful for qualifying the scientific curriculum;

4. foreign citizens are requested to attach copy of the University degree/academic qualification certificate inclusive of the list of individual exams and the final score, or copy of the equivalent foreign degree certificate, and copy of the PhD certificate or of the equivalent foreign academic qualification;

5. list of qualifications and of any other submitted document, specifying the number of works and published papers;

6. declaration (Attachment 2).

The undersigned authorizes the Administrative Office of INAF-Osservatorio

Astronomico di Roma to use and store her/his personal data only for the purpose of the

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present selection.

The undersigned wishes to receive communications concerning the selection at the following address (number/street/town/postal code/State): .....

(if possible list also phone number, fax number and e-mail address): .....

Place and date (dd/mm/yy).....

(Applicant's signature, not to be authenticated)

.....



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## ATTACHMENT 2

### SELF-CERTIFICATION

The undersigned (Forename(s))..... (Surname).....

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

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

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

As candidate to the selection for one research fellowship issued by INAF-Osservatorio Astronomico di Roma with Director's Decree n. .... /2013, aware that producing false statements and forged documents, as well as the use of forged documents shall be punished in accordance with the Criminal Code and with any other applicable special acts on this matter,

### DECLARES AND SELF-CERTIFIES

1) that submitted copies of academic theses and dissertations, of publications and works are conformal copies of the original documents;

2) to hold the following degree in: (discipline) .....

Date of award: (dd/mm/yy).....

Awarding University: ..... Final mark: .....

3) to hold the following academic qualifications:

PhD degree in: (discipline) .....

Date of award: (dd/mm/yy)..... Awarding University:.....

Final mark: .....

Certificates of attendance to post-degree courses: .....

Fellowships: .....

Research contracts/fellowships at private and/or public institutions: .....

Other:.....

Place and date (dd/mm/yy)

..... (\*)

(full applicant's signature)

(\*) Not authenticated

N.B. A photocopy, not authenticated, of a valid identity document of the applicant must be attached.