Year 2021

Determinazione n. XXXXXX

SUBJECT: Open call for application for n. 1 postdoctoral grant with title: "Sub-parsec resolution cosmological simulations of globular clusters"

THE DIRECTOR

HAVING REGARD TO the Legislative Decree July 23, 1999, n. 296, that foresee and

discipline the "Istituto Nazionale di Astrofisica" ("INAF") and

includes "Norme relative all'Osservatorio Vesuviano";

CONSIDERED that, in particular, art. 1, paragraph 1, of the Legislative Decree

July 23, 1999, n. 296, defines the "Istituto Nazionale di Astrofisica" as an ".....ente di ricerca non strumentale ad ordinamento speciale con sede in Roma ei con strutture operative distribuite sul territorio, nel quale confluiscono gli osservatori

astronomici e astrofisici....";

HAVING REGARD TO the Legislative Decree June 4, 2003, n. 138, that disciplines the

"Riordino dell'Istituto Nazionale di Astrofisica", as modified and integrated in the "Annex 2" of the Legislative Decree January 21, 2004, n. 38, that foresees and disciplines the "Istituzione dell'Istituto Nazionale di Ricerca Metrologica ("INRIM") following art. 1 of the law 6 July, 2002 n. 137" and, in particular,

art. 17, paragraph 1, letter b);

HAVING REGARD TO the Legislative Decree 30 June 2003, n. 196, and subsequent

amendments and additions, regarding the Code on protection of personal data, "Codice in materia di protezione dei dati

personali";

HAVING REGARD TO the Decree of the President of the Republic 11 February 2005, n.

68, in which it has been issued, as per art. 27 of the law 26 January 2003, n. 3, the "*Regolamento che disciplina l'utilizzo della Posta*

Elettronica Certificata", and, in particular, art. 16;

HAVING REGARD TO the Legislative Decree 7 March 2005, n. 82, and and subsequent

amendments and additions, regarding the "Codice della

Amministrazione Digitale";

HAVING REGARD TO the law n. 165 of 27 September 2007, that defines the principles

and guiding criteria of the "Delega al Governo in materia di riordino degli Enti di Ricerca" and, in particular, art. 1, 35 and

36;

HAVING REGARD TO

the Legislative Decree December 31, 2009, n. 123, that disciplines the "Riordino degli Enti di Ricerca in attuazione dell'articolo 1 della Legge 27 settembre 2007, numero 165";

HAVING REGARD TO

the Law n. 240 of 30 December 2010 regarding "Norme in materia di organizzazione delle università, del personale accademico e reclutamento, nonché la delega al governo per incentivare la qualità e l'efficienza del sistema universitario", in particular art. 22 and 29;

CONSIDERER

that art. 6, paragraph 2 bis, of the Law Decree of 31 December 2014, n. 192, regarding "*Proroga di termini previsti da disposizioni legislative*", and converted, with amendments, to Law 27 February 2015, n. 11, foresee that "*la durata complessiva dei rapporti instaurati ai sensi dell'articolo 22, comma 3, della legge 30 dicembre 2010, numero 240, è prorogata di due anni*";

HAVING REGARD TO

the "Regolamento (UE) 2016/679 del Parlamento Europeo e del Consiglio del 27 aprile 2016 relativo alla protezione delle persone fisiche con riguardo al trattamento dei dati personali, nonché alla libera circolazione di tali dati e che abroga la direttiva 95/46/CE (Regolamento generale sulla protezione dei dati)" ("RGPD"), starting from 24 May 2016 and valid since 25 May 2018;

HAVING REGARD TO

the new Statute of the "Istituto Nazionale di Astrofisica", that has been finally approved by the Administration Council with Resolution on 25 May 2018, n. 42, and published on the web site "Sito Web Istituzionale" on 7 September 2018;

CONSIDERED

therefore, that the new Statute of the "Istituto Nazionale di Astrofisica" entered in force on 24 settembre 2018;

HAVING REGARD TO

The "Disciplinare di Organizzazione e Funzionamento dell'Istituto Nazionale di Astrofisica", approved by the Administration Council with Resolution on 21 June 2012, n. 44, and revised by the same Administration council with Resolution 19 December 2013, n. 84, on 19 February 2014 n. 7, on 16 December 2015, n. 28, and on 19 October 2016, n. 107, in particular, art. 17;

HAVING REGARD TO

the "Regolamento sull'amministrazione, sulla contabilità e sull'attività contrattuale dell'Istituto Nazionale di Astrofisica", prepared under art. 18, paragraph 1 and 3, of the Legislative Decree 4 June 2003, n. 138, approved by the Administration Council with Resolution 2 December 2004, n. 3, and published in the Official Journal of the Italian Republic, n. 300 of 23 December

2004;

HAVING REGARD TO

the "Regolamento del Personale dello Istituto Nazionale di Astrofisica", approved by the Administration Council with Resolution of 11 May 2015, n. 23, and published in the Official Journal of the Italian Republic, n. 253 of 30 October 2015;

HAVING REGARD TO

the "Disciplinare per il conferimento di assegni per lo svolgimento dell'attività di ricerca dell'INAF" approved with resolution of the Administration Council of INAF n. 44/2011 of 22/06/2011, valid starting from 1 July 2011 and subsequent amendments and addition;

HAVING REGARD TO

the Resolution n. 8/2011 of 13/10/2011 that approves the "Modifiche al Disciplinare per il conferimento di assegni di ricerca";

HAVING REGARD TO

the "Linee guida per l'arruolamento del personale non di ruolo", approved with Resolution by the Administration Council of INAF n. 22/2018 of 23 March 2018, providing indications regarding the calls for research program activity;

HAVING REGARD TO

the note of the Scientific Director of 5 February 2018, Prot. 673, title V, cl. 1 regarding "Indicazioni sulla formulazione delle richieste di emissione di bandi relativi all'arruolamento di personale non di ruolo";

HAVING REGARD TO

the Resolution of the Administration Council of INAF, n. 8, of 29 January 2019, of approval of the amendments to the "Linee Guida provvisorie per il conferimento di assegni per lo svolgimento di attività di ricerca";

CONSIDERED

that art. 7 c.3 of the provisional Guidelines for the conferment of research grants, foresee that the grant holder is required to take out an insurance policy against the risk of accidents, which must be shown when the contract is formalized. In case of research grants funded through research projects of the European Union or other foreign institutions, international or supranational, where specifically indicated in the grants or contracts, the cost of the insurance policy burden on the project funds.

HAVING REGARD TO the Resolution of 15 may 2020, n. 40, in which the Administration

Council approved the "Definizione della nuova Policy per il conferimento di assegni per lo svolgimento di attività di ricerca e per il reclutamento di personale con rapporto di

lavoro a tempo determinato";

CONSIDERED the note of the Director General of 16 May 2020, n. 2491,

regarding the "Adozione della Disciplina per la razionalizzazione delle procedure di reclutamento di personale con rapporto di lavoro a tempo determinato e per il conferimento di assegni per lo svolgimento di attività di

ricerca e regolamentazione del regime transitorio";

HAVING REGARD TO The resolution of 21 December 2017, number 110, by which the

Board of Directors assigned the new "Struttura di Ricerca", deriving from the merger of the "Istituto di Astrofisica Spaziale e Fisica Cosmica" and the "Osservatorio Astronomico di Bologna" the denomination of "Osservatorio di Astrofisica e

Scienza dello Spazio"

HAVING REGARD TO the Decree of the INAF President of 22 December 2017 n. 92, in which Dr. Andrea Comastri was appointed as Director of the

"Osservatorio di Astrofisica e Scienza dello Spazio di Bologna";

HAVING REGARD TO the Resolution of the Director General of INAF, 22 December 2017,

n.334, in which Dr. Andrea Comastri has been appointed the role of Director of the "Osservatorio di Astrofisica e Scienza dello

Spazio di Bologna";

HAVING REGARD TO the Resolution of 22 December 2020, number 96, by which the

Board of Directors designated, among others, Dr. **Andrea Comastri**, with effect from **1 January 2021** and for the duration of three years, as Director of the ""*Osservatorio di Astrofisica e*

Scienza dello Spazio di Bologna";

HAVING REGARD TO the Decree of the INAF President n. 14/2020, of 30 December

2020, in which Dr. Andrea Comastri was appointed as Director of the "Osservatorio di Astrofisica e Scienza dello Spazio di

Bologna";

HAVING REGARD TO The Decree of the Director General of INAF, 30 December 2020,

n.188, in which Dr. Andrea Comastri has been appointed the role of Director of the "Osservatorio di Astrofisica e Scienza dello

Spazio di Bologna":

HAVING REGARD TO the request, n. 839 of 5 August 2021, by Dr. Francesco Calura,

employee of Osservatorio di Astrofisica e Scienza dello Spazio

di Bologna", as the Scientific supervisors of the research grant;

CONSIDERED

that the research grant, as defined in the aforementioned request, will be borned on the project ("Obiettivo Funzione") 1.05.01.85.01 (PRIN INAF 2019 "Sub-parsec resolution simulations of globular clusters in a cosmological model") and Obiettivo Funzione 1.05.01.01 (Ricerca di Base)"; for which Dr. Francesco Calura is the local reference at INAF-OAS Bologna; possible subsequent extensions will be borned either on the same project or from other research projects possibly funded in the future, subjected to approval from the PI of the projects, and including the aforementioned lines of research among their scientific programs;

VERIFIED

the financial availability of sufficient funds allocated in the Obiettivo Funzione 1.05.01.85.01 (PRIN INAF 2019 "Sub-parsec resolution simulations of globular clusters in a cosmological model") and Obiettivo Funzione 1.05.01.01 (Ricerca di Base);";

HAVING REGARD TO

the authorisation received from the Scientific Directorship on 20 september 2021;

as stated and expressed above

DECREES

Art. 1 - Object of the Call

A selection is called, based on qualifications and possible interview, for n. 1 grant for the duration of 2 years for carrying out research activities on: "Sub-parsec resolution cosmological simulations of alobular clusters".

In a project aimed at performing high-resolution cosmological simulations of proto-galactic systems at high redshift (z>6) to investigate the physical conditions where the first Globular Clusters originated, the grant holder will take care of code development, of the analysis of extant simulations and comparison with available observations, which concern primarily the properties of extremely compact systems detected thanks to gravitational lensing and hosting young stellar clusters.

This selection procedure is contextually aimed:

- to offer the opportunity of professional growth to young PhD holders, or to research fellows, or fix-term employees who are willing to get engaged in both national or international research environments in the perspective of turnover and mobility, which means to employ specific professional competences for fix-term projects and/or research activities;
- to fill positions that stands outside programs of permanent staff recruitment, and consequently do not represent binding prerequisite for employment as permanent staff of the institute;

The grant holder will carry out the activity at the INAF - Osservatorio di Astrofisica e Scienza dello Spazio di Bologna, under the scientific supervision of Dr. Francesco Calura

The responsible for the procedure of the present call is Manuela Spiga.

Art. 2 - Requirements for participation

Participation to the selection is reserved to Italian and foreign citizens holding the following minimum requirements (besides what reported in the "Regolamento del Personale INAF" mentioned above in the premises):

- 1) PhD or equivalent degree awarded by foreign University (the equivalence will be set by the selection committee based on criteria decided in advance);
- 2) Master degree issued according to the previous Italian University regulation or degree (level 2) or equivalent degree, awarded by foreign University or Advanced Studies Institute which were deemed equivalent by Italian Authorities or whose equivalence will be set by the selection committee, that allow to access the PhD and any subsequent demonstrated experience of at least three years about technological or scientific activities.

The applicants having obtained a degree in a foreign University, which was not already declared complaint to the Italian law, will be admitted to the evaluation provided they demonstrate to have started the procedures to obtain the declaration of equivalence of the foreign degree with the Italian one. In order to be fully considered by the selection committee, applicants should properly fill the corresponding form (annex D).

The successful candidate in possession of a qualification obtained abroad that has not been declared equivalent, will have 30 days from the end of the competition procedures to present the equivalence or equivalence of the qualification under penalty of exclusion from the ranking.

An excellent knowledge of the English language is also required.

Preferential requisites will be:

- relevance of the scientific profile of the candidates;
- curriculum vitae and scientific curriculum of the candidates;
- publications relating to the announcement;
- other qualifications (including: contributions to congresses, seminars)
- up to three reference letters regarding the scientific topic of this Call.

Art. 3 - Ineligibility and incompatibility with other funding

The research grant of the present call cannot be awarded to Italian permanent staff of any University, public institutions and Italian research public institutes according to art. 8 of the DPCM 30 December 1993, n. 593 and subsequent amendments and additions.

The grant cannot be held contemporarily with other fellowships of whatever kind (University and other institutions or research institutions), except those awarded with the aim of integrating the training or

research activity of the fellowship holder through a period spent abroad.

The fellow must issue an explicit declaration of the non-existence of the aforementioned inadmissible accumulation situations, upon acceptance of the grant.

The public employee who may be the recipient of the check referred to in this announcement may be admitted after being placed on leave without pay, according to the current regulatory and/or contractual provisions of the sector, by their own administration.

Art. 4 - Duration of the Research fellowship

The Research fellowship will last 24 months to begin by **1 February**, **2022**, the exact initial date could be reasonably discussed with the grant holder, and is renewable -- with action of the Director of INAF-OAS Bologna, after specific request by the the scientific supervisor and responsible of the funds, verified the necessary financial coverage -- for a number of annuity not larger than the maximum foreseen by the INAF disciplinary concerning "Postdoctoral grants".

Any renewals could burden financial funds associated with projects of INAF-OAS Bologna, in line with the scientific goals described in the art. 1.

Possible delays of the starting date of the research grant, or possible interruption of the research activity, will be allowed in accordance with current legislation.

The motivated interruption of the research activity, implies the suspension of the salary for the same period in which the research activity is interrupted, and consequently the final deadline for the expiry of the research grant is postponed by a period equal to the duration of the interruption.

Art. 5 - Salary amount, and insurance policy

The grant is worth 28.000,00 (two – eight thousand/00) Euros gross per year, inclusive of all charges payable by the grant holder, and will be paid in deferred monthly installments.

The amount does not include any cost related to missions that might be necessary to pursue the research activity linked to the research grant; in that case the INAF legislation for such missions will apply.

For what concerns tax, social security matters, compulsory maternity leave and sick leave, the resolutions according to art. 22, paragraph 6, of the Law 240 of 2010 and provisions of the INAF Regulations will be applied.

The grant holder is required to take out an insurance policy against the risk of accidents, which must be shown when the contract is formalised.

Art. 6 - Application, deadline

Applications must be submitted in English or Italian, strictly following the attached scheme (Annex A), dated, signed and accompanied by the required documentation, and must be sent by the deadline of **2/11/2021**, exclusively by mean of the Certified Electronic Post at the address inafoasbo@postecert.it indicating in the subject the following: "Post-doc GC_Cosmo". Applications sent via the Certified

Electronic Post including the declarations according to the DPR 445/2000, will be considered valid if the author is identified through the access credentials relating to the personal user of Certified E-mail. Applications that are not consistent with the attached form (Annex A) or without the applicant's signature will be excluded from the selection procedure.

Foreign citizens can send the application and the associated declarations (and communications) by mean of ordinary electronic mail (e-mail) to the address inafoasbo@postecert.it indicating in the subject: "Post-doc GC_Cosmo". An email will be sent to the candidate confirming receipt of the application.

Aware that false declarations are punishable by law and that the Administration may carry out random checks on the veracity of the statements made, the candidate must clearly and precisely declare in the application under his own responsibility:

- -name and surname, date and place of birth, nationality, residence and address for sending correspondence,
- -to possess all the requirements described in art. 2 of this announcement;
- -not to be in some of the incompatibility conditions described in art. 3 of this announcement.

The lack of the aforementioned declarations will result in exclusion from the selective procedure for incomplete application.

For the purposes of selection, the candidate:

- can self-certify the possession of academic qualifications through Attachment A. In addition
- -Citizens of non-member states of the European Union residing outside Italy, if successful, must produce the original or a certified copy of the qualifications obtained outside Italy.

To participate in this selection, the **following documents** must be submitted:

- 1. Annex A application form
- 2. **Annex B substitutive declaration of certification -** substitutive declaration of deed of notoriety (art.19 46 47 of Presidential Decree 28 December 2000, n. 445);
- 3. "Curriculum vitae", signed and dated by the candidate, which also indicates any scholarships and research grants previously or in progress;
- 4. Copy of a valid identity document;
- 5. List of publications
- 6. **Any other qualification,** work experience, research activity at public or private institutions and publications that the candidate deems appropriate to attach;
- 7. List of all documents submitted.

Candidates are admitted to the selection with reserve and may, at each stage, be notified of their exclusion from the selection for the following reasons:

the application was submitted after the deadline;

- -lack of signature of the application;
- -lack of signature of the curriculum vitae;
- -lack of a copy of a valid identity document;
- -lack of the requirements indicated in art. 2.

If the reasons for exclusion are ascertained after the conclusion of the selection procedure, the

candidate will lose all rights deriving from participation in the selection; similarly, we will proceed if the production of false declarations is ascertained.

All the documents need to be in the original form or certified copy; in the latter case by means of self-certification according to art. 46 of the DPR 28/12/2000, n. 445, or by means of a copy with attached the aforementioned self-certification, according to art. 19 of the DPR 28.12.2000 n. 445 and through a self-declaration according to Artt. 46 and 47 of the DPR 28.11.2000 N. 445, following the scheme shown in the attachment B; (especially for the publications not present in the ADS database). Any declaration (and self-certification) must be accompanied with a copy of a valid identity document;

Within the same deadline as specified above, up to three letters of reference must be sent to the address francesco.calura@inaf.it. Dr. Francesco Calura will forward them, within the same deadline, to the address inafoasbo@postecert.it. Letters received after the deadline will not be considered.

INAF - Osservatorio di Astrofisica e Scienza dello Spazio di Bologna assumes no responsibility for the dispersion of communications resulting from inaccurate indication of the address by the candidate or omitted or late communication of the change in the address indicated in the application, nor for any disservices related to the computer network.

Disabled applicants, according to Law n. 104 of 5 February 1992, must request specifically, in the application, related to their handicap, regarding the necessary aid, as well as the possible need for additional time for the completion of any interview, according to the aforementioned law.

The applications that are not signed, those received after the deadline and those that do not comply with what described in this article will not be taken into consideration;

Art. 7 - Exclusion from selection

Candidates are admitted to the selection with reserve, subject to successful checks on the candidate's qualifications according to art. 2 of this Call. The justified exclusion from the selection can be ordered at any time by the Director of the INAF-OAS Bologna.

The candidates excluded from the selection, with justified provision by the Director of INAF-OAS Bologna, will be notified by registered letter with acknowledgment of receipt or by certified email (PEC), if the candidate provided an address for the certified email (PEC).

Art. 8 -Selection Committee and selection procedure

The selection of the candidates will be performed by a Selection Committee appointed according to art. 9 of the INAF Disciplinary by the Director of INAF - OAS Bologna and is composed by three members, from either Italian or foreign research staff or from the University, with expertise in the research field of the position offered in this announcement (art. 1).

The Selection Committee will first define the selection criteria to be applied on the titles and the possible interview, according to art. 2, and before accessing all the documentation provided by the candidates.

For the evaluation of the qualifications and the possible interview, the Selection Committee complies

with the provisions of the Disciplinary INAF, in particular to artt. 10 and 11.

At the end of the evaluation of the qualifications, a ranked list of the candidates is produced by the Committee, with a score associated to each candidate. The list, signed by the President and Secretary of the Committee, will be posted at the same day of examinations at INAF - OAS Bologna.

If necessary, the Committee can integrate the evaluation of the qualifications by adding an interview that will be performed only electronically. Applicants selected for the possible interview will be informed at least 15 days before the date of the interview.

In order to perform the interview electronically, candidates need to fill the form (annex C) specifying the preferred platform (e.g., Skype, etc.). A valid account needs to be specified in the form. The same account will be used by the Selection Committee to arrange and carry out the interview. The online interview will be performed the same day of the other (ordinary) interviews and will have public access. The Selection Committee will notify the online interview following the same procedure used for the notification of the traditional interviews.

INAF does not provide for the reimbursement of any expenses incurred by candidates for participation in any interview.

At the end of the evaluation, the Committee will draw up a final ranked list according to the score assigned to each candidate and will indicate the grant holder corresponding to the candidate with the highest score. In case of equal score, the youngest candidate is selected.

The Committee will send the ranked list to the Director of INAF-OAS Bologna per the final approval and subsequent post on INAF - OAS Bologna website.

Art. 9 - Awarding of the fellowship

After the publication of the final ranked list, the Director of INAF - OAS Bologna will notify the highest ranked candidate of the award of the grant.

Within 10 days from the date of receipt of the formal communication, the winner will issue a formal declaration of acceptance of the research grant, at the same time certifying that he is not in any of the impediments provided for by art. 4 of this announcement.

If the candidate does not provide a declaration of acceptance within a period of 10 days, the right to the research grant that can be assigned to the next ranked candidate forfeits the right to.

The stipulation of the contract does not in any case give rise to a subordinate employment relationship or to rights regarding access to the roles of INAF.

In the case that the fellow is an employee of a public administration, before starting the research activity, they must submit a copy of the placement on unpaid leave.

As regards the risks of civil liability towards third parties, the fellow will be covered by insurance stipulated by INAF. This insurance does not cover the civil liability of the holder of the check towards INAF.

The grant holder that will interrupt without justified reason the research activity, during the foreseen assigned period, or will be responsible for serious or repeated failures, or proves that he does not have sufficient aptitude for carrying out the research activity, will be declared discharge from the assigned grant after the justified provision of the Director of INAF - OAS Bologna, after request by the scientific Supervisor.

The grant holder may withdraw from the contract after giving written notice of at least 30 days in advance. In case the alert is not properly notified in advance, INAF - OAS Bologna has the right to withhold the amount corresponding to the notice period not given.

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 Processing of personal data

- 1. According to art. 13 of the "Regolamento (UE) 2016/679 del Parlamento Europeo e del Consiglio del 27 aprile 2016 relativo alla protezione delle persone fisiche con riguardo al trattamento dei dati personali, nonché alla libera circolazione di tali dati e che abroga la direttiva 95/46/CE" also known as "Regolamento generale sulla protezione dei dati", l'"Istituto Nazionale di Astrofisica Osservatorio di Astrofisica e Scienza dello Spazio", as the owner of the procedure, informs that the processing of the data made available by the candidates who submit an application to participate in this Call, or acquired by the "Osservatorio", it is aimed solely at carrying out the activities, acts and provisions envisaged by the aforementioned procedure and will be carried out by the persons responsible for its execution, including the members of the Examining Commission.
- 2. The processing of personal data will be performed with suitable procedures, aimed to pursue the purposes specified in the previous paragraph, even in the event of any communication to third parties.
- 3 Personal data are necessary to verify the requisites needed for the participation in the selection procedure; any missing personal data may preclude such verification.
- 4. Candidates have the rights according to Art. 15 and subsequently, of the "*Regolamento generale sulla protezione dei dati*" and in particular, have the right to access their data, to request their rectification, cancellation, limitation to the processing, as well as to oppose the processing, which may be exercised by sending a proper request to the "*Istituto Nazionale di Astrofisica*", located in Rome, Viale del Parco Mellini n. 84, postal code 00136, following the procedures defined in the next paragraph.
- 5. The rights indicated in the previous paragraph may be exercised, without any formalities, by sending a request to the "Responsabile della Protezione dei Dati" dell'Istituto Nazionale di Astrofisica":
 - a) by registered letter with acknowledgment of receipt to the address specified at the paragraph 4 of this article;
 - b) by e-mail to the following address: rpd@inaf.it;
 - c) by certified e-mail (PEC) to the following address **rpd-inaf@legalmail.it**;
- 6. Candidates who believe that the processing of their personal data is carried out in violation of the provisions contained in the "*Regolamento Generale sulla protezione dei Dati*" and those according to the present article can lodge a complaint to the Guarantor for the protection of Personal Data, according to Art. 77 of the aforementioned Regulation, or to appeal to the competent judicial authority, according to Art. 79 of the aforementioned Regulation.



Art. 11 – Advertising

The full advertising of this announcement is arranged through publication on the website of the National Institute of Astrophysics (http://www.inaf.it/) and on the website of the INAF - OAS di Bologna (http://www.oas.inaf.it).

Art. 12 - Final Provisions

For what is 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.

Bologna, XXXXXXX

Il Direttore Dr. Andrea Comastri