



Research sector

Decree n. 971

Office for phd and postdoc

### THE RECTOR

- GIVEN** the Statute of the Università degli Studi di Cassino e del Lazio Meridionale issued by D.R. n. 661 of July 26, 2018;
- GIVEN** the Law n. 240 of December 30, 2010 on “Norme in materia di organizzazione delle Università, di personale accademico e reclutamento, nonché delega al Governo per incentivare la qualità e l'efficienza del sistema universitario” and in particular the Art. 22 on “Assegni di ricerca” (Research grants, in the following);
- GIVEN** the D.M. n.102 of March 09, 2011, setting the minimum annual gross remuneration of a Research grant at € 19.367.00, net of the expenses charged to this Administration;
- GIVEN** the D.R. n.267 of June 07, 2011, issuing the current Regulations for the assignment of Research grants, modified with D.R. n. 883 December 02, 2019;
- GIVEN** article 14 paragraph 6-septies of D.L no. 36 of April 30, 2022 converted with amendments by Law no. 79 of June 29, 2022, which introduced the research contract to replace the research grants, provided for by article 22 of Law 240 of 2010;
- GIVEN** article 14 paragraph 6-quaterdecies of D.L no. 36 of April 30, 2022 converted with amendments by Law no. 79 of June 29 2022, as amended by article 6 paragraph 1 of the D.L. n. 198 of December 29,2022, which provided for the possibility of launching procedures for the awarding of research grants until December 31, 2023;
- GIVEN** the resolutions of the Academic Senate and of the Administrative Committee of December 12, 2023 and December 13, 2023 respectively that approve the activation of one Research grant at the Dipartimento di Ingegneria Elettrica e dell'Informazione, of duration to be determined according to the available resources, titled “Development of distributed state estimation algorithms for autonomous underwater vehicles” - SSD ING-INF/04 (Automatica), under the scientific responsibility of Prof. Stefano Chiaverini;
- GIVEN** the note prot. 26256 of December 13, 2023 with which the administrative responsible of the Department of Electrical and Information Engineering, in partial rectification of the activation request sent with protocol note. 25450 of 06.12.2023, communicated that the tutor of the grant is Dr. Paolo Augusto Di Lillo;
- CONSIDERED** that the sum needed to finance the grant, amounting to € 30,000.00 gross income, will burden funds of the project PRIN2022 COMET for which is responsible Prof. Stefano Chiaverini – CUP: H53D23000560006 (Preimpegnò 5559/2023);

### DECREES



### Art. 1 - Positions available

A public selective procedure based on qualifications and interview is held at the Università di Cassino e del Lazio Meridionale for the assignment of one Research grant at the Dipartimento di Ingegneria Elettrica e dell'Informazione, indicated in the Annex A, which is an integral part of this Call.

### Art. 2 - Eligibility requirements

To be admitted to the selective procedure, without any limitation of age and citizenship, an applicant must have earned one of the following:

- laurea degree got in Italy under the regulations in effect before the reform of the university teaching autonomy;
- laurea magistrale degree or laurea specialistica degree got in Italy;
- an equivalent university degree got abroad,

The equivalence of the degree diploma and any other qualifications obtained abroad that have not already been recognized in Italy in accordance with current legislation is assessed, for the sole purpose of admission to the selection, by the judging commission referred to in art.7 .

Holding a Ph.D. title is a preferential qualification to the grant assignment.

Permanent staff of Italian Universities, of Astronomical or Astrophysical or Vesuvian Observatories, of public Research Bodies, of ENEA, of ASI, of the National Agency for the New Technologies and, in any case, of the Bodies listed at Art. 22, paragraph 1, of L. 240/2010 cannot be Research grant holders, and thus are automatically excluded from the selective procedure.

According to Art. 18, paragraph 1, lett. b) and c) of L. 240/2010, Research grants cannot be assigned to applicants being relative or in-law, up to the fourth degree of kinship included, to the tenure professors of the Department or of the organization where the research is carried out, or to the Rector, or to the General Director, or to a Member of the Administrative Committee. Fulfillment of this condition must be explicitly stated in the application to the selective procedure.

The requirements mentioned above need to hold at the deadline for the application submission fixed in this Call.

Applicants are admitted to the selection procedure with reservation.

The Administration has the right, with justified disposition, to exclude in any moment applicants missing the needed requirements.

### Art. 3 - Application and submission deadline

The application to compete in the public selective procedure, which acts also as self-certification given according to D.P.R. 445/2000, is to be written in Italian or in English, following the form given in the **Annex B** attached to this Call; it must be addressed to the Magnifico Rettore dell'Università degli Studi di Cassino e del Lazio Meridionale - Ufficio Dottorati ed Assegni di Ricerca – Viale dell'Università - Campus Folcara - 03043 Cassino, and needs to be mailed, sent by certified e-mail to the address [doctoratieassegnidiricerca@pec.unicas.it](mailto:doctoratieassegnidiricerca@pec.unicas.it), or, for non-EU candidates, by ordinary email to [c.manzo@unicas.it](mailto:c.manzo@unicas.it), or delivered in person to the Ufficio Protocollo of the University, **within 30 days**, on penalty of exclusion, starting from the publication date of this Call on the Albo Ufficiale (Official Board) of the University. The Call will be also advertised in the Official Board of the interested scientific structures of the University and made accessible via telematic ways on the web sites of the University, of the Ministry and of the European Union.



To assess observance of the submission deadline, it must be considered:

- *in case of mailing*: the stamp of the Post Office from which the application is sent,
- *in case of shipment by email or PEC*: the date of sending of the email;
- *in case of delivery in person*: the stamp of the Ufficio Protocollo of the University of Cassino e del Lazio Meridionale.

It is not necessary to authenticate the signature at the foot of the application, however, on penalty of exclusion, (photo)copy of a valid Identification document needs to be attached to the application itself.

The Administration is not responsible for the missing delivery of communications due to a wrong address given by the applicant, neither to a missing or delayed communication of changes in the address specified in the application, neither to postal or telegraphic misdelivery.

#### **Art. 4 - Qualifications and curriculum**

The application must be completed with the following attachments:

- a) laurea degree certificate, with indication of the scores achieved in the single progress examinations and in the laurea examination;
- b) documents and qualifications considered useful to the end of the selection (publications, Ph.D., specialization certificates, certificate of attendance to post-laurea specialization courses, got in Italy or abroad, scholarships or research assignments carried out in Italy or abroad, laurea degree thesis, etc. either in original or in suitably authenticated copy, recommendation letters);
- c) curriculum of the scientific and professional activity;
- d) (photo)copy of a valid identification document;
- e) (photo)copy of the fiscal code, or equivalent for foreign applicants.

The qualifications must be coherent with the scientific/education sector specified in the

#### **Annex A.**

In lieu of the certificates related to the above items a), b) and c), the applicant may attach a self-certification given according to Art. 46 and 76 of D.P.R. 445 of December 28, 2000.

With reference to the publications that he considers useful to the ends of the selective procedure, the applicant should also give a suitable declaration of being them true copies, according to D.P.R. 445/2000

#### **Art. 5 - Selective procedure**

The selective procedure is based on qualifications and interview.

The Committee, as defined in the following Art. 7, in the first meeting specifies the criteria and modality of evaluation of the qualifications and of the interview. Next, the Committee evaluates the curricula and the attached documents, with specific attention to the scientific production of the applicant.

The qualifications are evaluated before starting the interviews.

In any case, with specific reference to coherence with the scientific area chosen by the applicant, subject of evaluation are:

- the Ph.D. title and the achievement of scholarships aimed to research activity;
- specialization certificates and certificates of attendance to post-laurea specialization courses, got in Italy or abroad;
- proven research activity carried out at public or private Bodies under contracts, scholarships



and assignments, both in Italy and abroad;

- a scientific and professional curriculum focused on the experience in research activity;
- scientific publications of original and relevant scientific content.

The interview will deal on the overall curriculum of the applicant and on the subjects specified in **Annex A**, and it will be aimed at assessing his eligibility to develop the research activity.

#### **Art. 6 - Schedule of the examinations**

The interviews will be held on **8 February 2024** at **4.00 pm**, from remote.

Candidates not excluded from the procedure must connect, without further notice, to the following link: <https://meet.google.com/ngf-ymcd-buy>, with a valid document.

#### **Art. 7- Evaluation Committee**

The Evaluation Committee is appointed by a decree of the Rector, and is composed by staff professors and researchers who represent the relevant scientific areas.

The Committee may include the Responsible of the research project.

If it doesn't bear additional costs to the Administration, the Committee may resort to expert referees of high qualification, Italian or foreign, external to the University.

The Committee elects among its members a President and a Secretary.

#### **Art. 8 - Ranking**

At the end of the examinations, and following a comparative evaluation among the eligible candidates, the Committee writes the minutes that indicate the person awarded of Research grant, with a resolution taken by majority vote.

The Rector, by a decree, verifies within 30 days from delivery of the minutes the validity of the proceedings and appoints the winner of the selective procedure.

The results of the selective procedure are published on the web page of the University.

#### **Art. 9 - Awarding and starting date**

The awarding of the Research grant is formalized by a contract between the Università degli Studi di Cassino e del Lazio Meridionale and the winner of the grant, which specifies the collaboration to the research activity.

#### **Art. 10 - Amount of the Research grant and terms of payment**

The gross amount of the Research grant is € 30.000,00 including all the expenses to be charged to the Administration.

The grant will be paid in equal-amount monthly rates.

#### **Art. 11 – Obligations and rights**

The Research grant cannot be cumulated to other scholarships whatever the reason of the award, except those of national or foreign institutions aimed to supplement with a stay abroad the research activity of the title of the grant.

The Research grant holder cannot be enrolled to laurea degree, laurea magistrale degree or laurea specialistica degree, master, granted Ph.D. or medical specialization courses, in Italy or abroad.

In case of withdrawal, the Research grant holder must communicate it to the



Administration with at least a three-month notice.

A Research grant holder being permanent staff of a public Administration goes in leave without pay.

The Research grant undergoes the fiscal rules specified in Art. 4 of the Law 476/1984, and the welfare rules specified in Art. 2, paragraph 26 and following of the Law 335/1995 and its next modifications.

Compulsory maternity leave undergoes the rules in the Decreto del Ministro del Lavoro e della Previdenza Sociale published on the G.U. n. 247 of October 23, 2007, and sick leave undergoes the rules in Art. 1, paragraph 788 of the Law 296/2006.

#### **Art. 12 - Development of the activity and assessment**

The activity of the Research grant holder is carried out autonomously and without prefixed working hours, in the sole limit of the research program and of the directions given by the Responsible of the research itself. The latter is obliged to duly communicate to the Department and to the competent administrative offices any possible contract breach of the Research grant holder, even aimed to the suspension of the grant payment, unless severity of the breach demands for rescission of the contract.

#### **Art. 13 - Reference regulations**

What is not explicitly specified in the present Call undergoes the regulations published with D.R. n. 267 of June 07, 2011 and modified with D.R. n. 883 of December 02, 2019.

This decree is collected within the internal official repository of the University.

Cassino, December 20, 2023

**THE RECTOR**  
**(Prof. Marco DELL'ISOLA)**



**n. 1 research grant for a period of 12 months**

**Venue of the research activity:** Dipartimento di Ingegneria Elettrica e dell'Informazione

**Scientific sector:** ING-INF / 04 (Automatica)

**Research title:** "Development of distributed state estimation algorithms for autonomous underwater vehicles"

**OBJECTIVES OF RESEARCH AND PROGRAM OF ACTIVITIES**

The research objectives focus on the development of distributed state estimation algorithms for a team of Autonomous Underwater Vehicles. Specifically, the approaches should be robust to a communication among the vehicles characterized by high latencies, propagation delay, and packet loss. Additionally, the integration of asynchronous commands from a human operator must be appropriately considered. The candidate may propose solutions based on optimization and/or Artificial Intelligence, which will be employed in the experimental campaigns foreseen in the project.

**Requirements:**

Degree in computer, automation, mechanical, electronic, electrical, telecommunications or similar engineering.

**Evaluable qualifications:**

Preferred qualification: doctorate on topics relating to the research objectives.

**PROGRAM OF THE INTERVIEW**

The interview will be focused on the expertise of the applicant in the field of dynamic systems, distributed state estimation, C/C++ programming and Matlab. Finally, IT skills in a Linux environment, proven experience of experimental activities and a good knowledge of the English language are required.

**DISCIPLINES TO WHICH TO REFER FOR THE TITLES**

The disciplines of the sector ING-INF/04 (Automatica).

**TUTOR**

Prof. Paolo Augusto Di Lillo



**ALL. B**

*Al Magnifico Rettore  
Università degli Studi di Cassino e del Lazio  
Meridionale  
Rettorato  
Ufficio Dottorati ed Assegni di Ricerca  
Viale dell'Università  
03043 Cassino FR*

The undersigned (*last and first name*) \_\_\_\_\_

born in \_\_\_\_\_ (country \_\_\_\_\_) on \_\_\_\_\_

resident in \_\_\_\_\_ (country \_\_\_\_\_)

address \_\_\_\_\_  
\_\_\_\_\_

address chosen to receive all the communications related to the call:

city \_\_\_\_\_ (country \_\_\_\_\_)

street \_\_\_\_\_

phone \_\_\_\_\_

e-mail \_\_\_\_\_

asks to be admitted to compete in the public selective procedure, based on qualifications and interview, to assign a research grant at the Department \_\_\_\_\_ of the Università degli Studi di Cassino e del Lazio Meridionale, entitled  
\_\_\_\_\_  
\_\_\_\_\_

To the purpose, according to D.P.R. 445/2000 and taking responsibility for it, he declares:

- 1) to be \_\_\_\_\_ citizen;
- 2) (*if citizen of one of the States member of the European Union*) to possess civil and political rights in the State of citizenship or residence;
- 3) to have never been given a penal sentence and to not have prosecutions ongoing;
- 4) to have earned the following degree:  
\_\_\_\_\_  
\_\_\_\_\_

on \_\_\_\_\_ with score \_\_\_\_\_,



at \_\_\_\_\_;

- 5) (*in case*) to have got the Ph.D. title in \_\_\_\_\_  
on \_\_\_\_\_ at \_\_\_\_\_;
- 6) to not have other scholarships whatever the reason of the award, or to renounce to them should he win the research grant;
- 7) to have (or not) accomplished the compulsory national military service;
- 8) to undertake to duly communicate any change in his residence address or in the address chosen to receive all the communications related to the call;
- 9) to not be permanent staff of Italian Universities, of Astronomical or Astrophysical or Vesuvian Observatories, of public Research Bodies, of ENEA and of ASI;
- 10) to not be relative or in-law, up to the forth degree of kinship included, to the tenure professors of the Department or of the organization where the research is carried out, or to the Rector, or to the General Director, or to a Member of the Administrative Committee;
- 11) (*in case*) according to the Law n. 104 of February 5, 1992, being a disabled person, to ask the use of the following aid needed to allow carrying on of the interview:

\_\_\_\_\_;

The undersigned authorizes the University of Cassino to process personal data in compliance with GDPR n. 679/2016 and Legislative Decree no. 101/2018.

The University of Cassino and Southern Lazio is the data controller, in the person of the Rector based in Cassino (mail: [rettore@unicas.it](mailto:rettore@unicas.it) – pec: [protocol@pec.unicas.it](mailto:protocol@pec.unicas.it))

The Data Protection Officer (DPO) is Dr. Elide Di Duca (mail: [rpd@unicas.it](mailto:rpd@unicas.it) – pec: [dpo@pec.unicas.it](mailto:dpo@pec.unicas.it))

Date .....

Signature

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The application must be completed with the following attachments:

- the certificates and the qualifications related to the selection procedure described in Art. 5 of the call text, or self-certification given according to D.P.R. 445 of December 28, 2000;
- a scientific and professional curriculum focused on the experience in research activity;
- scientific publications of original and relevant scientific content, or photocopy of them with suitable declaration of being true copies given according to D.P.R. 445 of December 28, 2000;
- an overall list of the above;
- photocopy of a valid identification document;
- photocopy of the fiscal code.