Art. 1 - Purpose

A public competition is launched, **based on qualifications and an interview**, at: **Dipartimento di Matematica**, Alma Mater Studiorum University of Bologna to award **no. 1** A) type research fellowships, called "**Mathematics and its application**" in the subject fields of **Mathematics , and of its applications to Physics, Computer Science, Engineering, Statistics or Economics**, specifically in the following sicientific areas :

INFO-01/A Informatics

MATH-01/A Mathematical logic

MATH-01/B Didactics and history of mathematics

MATH-02/A Algebra

MATH-02/B Geometry

MATH-03/A Mathematical analysis

MATH-03/B Probability and mathematical statistics

MATH-04/A Mathematical physics

MATH-05/A Numerical analysis

MATH-06/A Operations research

STAT-04/A Mathematical methods of economics and actuarial and financial sciences

In this scientific areas, research projects will be considered focusing specifically on the investigation of subjects conforming to those listed in "Allegato 1".

The research fellowships are issued pursuant to the University Regulation issued by Rector's Decree no. 416 of 19/04/2011, funded with funds from the Department's Integrated Research Budget (BIR) under the first BIR 2024 round, approved by the Department at the Council meeting on 24.04.2024

Candidates meeting the admission requirements listed in art. 2 below shall submit an original research project in the above-specified fields of investigation together with their application, qualifications and publications.

The activities will be performed under the supervision of a tutor identified by the structure as Prof.ssa ANNAMARIA MONTANARI, in a non-subordinate relationship with no set working hours.

The main place of work will be : DIPARTIMENTO DI MATEMATICA, Piazza di Porta San Donato, 5 – 40126 Bologna

Art. 2 - Requirements for candidacy

The selection is open to candidates in possession of the following qualification:

- PhD in Mathematics, Physics, Computer Science, Engineering, Statistics or Economics or equivalent qualification or old system or equivalent.
- 2nd cycle/specialist degree or degree from previous system or equivalent qualification in **Mathematics**, **Physics**, **Computer Science**, **Engineering**, **Statistics or Economics or equivalent qualification**, only in the event of possession of a certificate of passing the last year of the PhD indicated in the first point of this article.

Candidates must possess the admission requirements on the deadline for submission of applications laid down in this call. Candidates who do not possess the admission requirements will not be considered.

The selection is not open to any persons who are related by blood or by marriage up to the fourth degree, to a professor working in the department or structure for which the call is issued, or to the Rector, Director General or a member of the Board of Governors of the University.

The selection is also not open to anyone who has held research fellowship contracts with any institution, pursuant to Italian Law no. 240/2010, for a period which, summed to the foreseen duration of this contract, exceeds a total of 6 years, excluding any period in which the contract coincided with a PhD without

scholarship, for the maximum limit of the legal duration of the PhD programme.

Furthermore, the selection is not open to anyone who has had research fellowship or fixed-term researcher contracts at the University of Bologna or any other state-funded, private-funded or distance-learning Italian university pursuant to articles 22 and 24 of Italian Law 240/2010, or with any other body listed in paragraph 1 of Art. 22 of Italian Law 240/2010 for a period which, summed to the foreseen duration of this contract, exceeds a total of 12 years, even if not consecutive. For the purposes of the duration of the above-described periods, in compliance with the laws in force any periods of maternity or sick leave shall not be calculated.

Art. 3 - Application

Applications may only be submitted online by accessing the website: <u>https://concorsi.unibo.it.</u>, after completing the registration process, following the web procedure instructions. <u>The last day</u> **available to submit the application is Wednesdav October 09, 2024 at 23:59 - Europe/Brussels**; applications submitted after this time will not be considered. The date shown on the receipt sent electronically to the candidate is deemed to be the date of the application submission.

Any communications will be sent to candidates exclusively via email, to the address provided in the application.

In the online application, following the web procedure instructions, candidates must indicate, under their own responsibility:

- surname and name;
- date and place of birth;
- nationality;
- residence and chosen address for correspondence for the purposes of this selection;
- that they do not have a criminal record and are not involved in any current criminal proceedings(or if so, state which);
- that they have the qualification required by art. 2 of the call for applications, specifying theUniversity and year in which it was obtained;
- or
- that they possess an academic qualification obtained abroad, which is deemed equivalent. The candidates in possession of a qualification obtained abroad must annex to their applications a translation into Italian or in English of their foreign qualification, accompanied by a sworn statement that it is a faithful translation of the original certificate.

The foreign qualification may be declared admissible by the Evaluation Board, <u>solely</u> for the purposes of admission to the selection procedure.

In case of award, the winning candidates having obtained their qualification in a country outside of the European Union, must provide the Structure, in the same manner as laid down for the presentation of applications, the official translation with a declaration of value of the foreign qualification issued by the competent diplomatic representation or Italian consulate in their home country, in accordance with the applicable laws, within 15 days from the notification of official approval of the selection of the selection of the selection of the selection with a documents are not received by the Structure within the stated deadline, the candidate will not be awarded the contract.

Candidates <u>must</u> enclose with their applications the following documents, **or shall be rejected** from the procedure:

an original research project which has not been developed in collaboration with others or related to which others may not claim to have been involved in the original drafting. The project shall be directly correlated to the scientific area, among those indicated in article 1 of this call for applications.

The project shall indicate the specific purpose and outcomes of the research, **one or more scientific areas of reference among those listed in article 1 of this call for applications**, the project development timetable and, in order to pursue the set objectives, it shall be coherent with the contractual period of the research fellowship. **The project must concern one of the topics coherent with the enclosed training schedule (Attachment: "Allegato 1").**

Candidates <u>must</u> also enclose the following with their applications:

- copy of a valid identity document;
- their scientific and professional curriculum vitae also containing scientific productivity;
- any scientific publications, articles and doctoral theses: candidates may attach up to 5 publications considered of particular value, including the doctoral thesis.
- up to three letters of recommendation of professors or researchers of Italian or foreign Universities or research Institutions, at least two of which must not be affiliated with the University of Bologna. These letters can also be sent separately. For any letter of recommendation not included with the application, the applicant must indicate in the online application form information about: name and surname, e-mail address, name of institution of the reference person. In this case, the file with the letter must be submitted directly by the recommender following the instructions he/she will receive at the indicated e-mail address, within the same deadline as the application.

Candidates with certified disabilities pursuant to art.3 of Italian Law no. 104 of 05.12.1992 may intheir application request the benefits laid down in art.20 of the same Law, enclosing the original or anauthenticated copy of the certification relative to the specific disability issued by the competent territorial medical board. In this case, the candidate can send an e-mail to: dipmat.amminsitrazione@unibo.it, or contact the phone number +39 051 20 9 4408.

Candidates are admitted to the selection procedure with reserve.

At any time, even after participation in any tests, the Administration may, with justification, exclude them from the selection procedure. The concerned candidate will be notified of such exclusion.

Art. 4 - Comparative assessment of the candidates and the Evaluation Board

The candidates and their projects will be assessed comparatively by an Evaluation Board appointed by the Board of the Structure at the Council meeting on May 22, 2024 and formed by the following members:

Chairman : Prof. Alessandro Lanza (President) Member : Prof. Eugenio Vecchi (Segretario Verbalizzante) Member: Prof. Jacopo Gandini Additional member : Prof. Salvatore Federico

The selection procedure focuses on the examination of the selection criteria laid down in advance by the evaluation board, the submitted research project, the candidates' scientific-professional curriculum and the scientific work and publications resulting from the documents enclosed with the application as well as an interview, aiming to verify the suitability of the candidate for carrying out the research programme.

During the interview, the Board will also verify the candidates' knowledge of the foreign language(s) **English** on relevant sectoral topics.

The list of candidates admitted to interview will be published on the site calls, tenders and competitions https://bandi.unibo.it/ricerca/assegni-ricerca by Monday, November 04, 2024.

For information contact the phone number +39 051 20 9 4408

You may also request information by sending an e-mail to the following address: <u>dipmat.amministrazione@unibo.it</u>

The interviews will be held on Thursday, November 07, 2024, starting at 14.00 and if necessary (depending on the number of admitted candidates) on Friday November 08, 2024 starting at 13.00 at DIPARTIMENTO DI MATEMATICA, Aula Seminario I - Piazza di Porta San Donato 5 – BOLOGNA.

To be admitted for interview, the candidates must present a valid ID document.

Interview may also take place remotely by telematic means, using the tool of teleconferencing in audio and video through the Microsoft Teams platforms (the station from which the candidates will take the test must be equipped with a webcam – essential for the recognition of the candidate – a microphone and headphones and/or speakers.) Candidates admitted to the interview will receive personal notice of convocation, at the email address indicated in the application, containing the necessary references to be able to take the test. Outsiders who wish to participate in the interview should make contact with the Commission at the email address: alessandro.lanza2@unibo.it

The interview is in public form, so as to ensure maximum participation.

At the end of the selection procedure, the Board will draw up a ranking list of candidates for each area for a period of 6 months.

If two candidates receive the same scores, preference will be given to the younger candidate.

The Head of the Structure shall confirm in writing his/her approval of the list drawn up by the Board which will be published on <u>https://bandi.unibo.it/ricerca/assegni-ricerca</u>

The list of candidates may be used to award other research fellowships within the same scientific area, also of a lesser duration than that indicated in the call for applications and in any case no less than one year.

Art. 5 - Duration and amount of the contract

The research fellowships have a duration of 12 months and may be extended in the terms laid down in article 8 of the University Regulation concerning research fellowships, as issued by D.R. no. 416 of 19/04/2011.

The gross amount of the research fellowship contract is € **21.077,66** per annum. The amount is exempt of withholding tax and includes all statutory social security charges the Research Fellow is subject to.

The amount will be paid in deferred monthly payments.

The Research Fellows are covered by accident insurance, against payment of the required contribution which will be withheld from the first monthly instalment.

Art. 6 – Contract signature

The winning candidate will be invited to sign a contract for research activities with the Structure no later than **Saturday**, **November 30**, **2024**

The non-acceptance within the deadline notified by the structure shall lead to the forfeiture of the right to sign the contract.

Art. 7 - Rights and Duties

a) For obligatory maternity leave, the contract is governed by the provisions of paragraph 6 art. 22 of Italian Law no. 240/2010.

b) The research activities are carried out under the supervision of the tutor, in a non-subordinate relationship with no fixed working hours. The research fellow shall personally carry out the required activities laid down in the Activity Programme without any substitution.

c) Research Fellows assigned to medical and clinical subject areas: the Research Fellow may carry out care activities exclusively for the purposes and needs of the research project, in the methods and limits laid down in the contract, or, in the case of activities carried out in healthcare structures, as laid down in specific agreements between the university and the health board.

d) At the end of the activities, the Research Fellow shall present a detailed final report to the Board of the structure, describing the activities carried out, the results achieved and the scientific developments, accompanied by the opinion of the tutor.

e) The Research Fellow may spend a period of study abroad, in line with a programme agreed with the department and with expenses borne by the department, without prejudice to the possibility to obtain specific funding.

Art. 8 - Regulations concerning Intellectual Property

Industrial Property rights over the results achieved by the Research Fellow in the execution of research activities undertaken on behalf of the University, including but not limited to industrial inventions, models, drawings, plant varieties, as well as the intellectual and industrial property rights deriving from the production of software or databases ("Results"), belong exclusively to the University, which may freely use them also within agreements made by the departments with third parties, without prejudice to the moral rights of the Research Fellow who shall be acknowledged as the author or inventor.

The Research Fellow has the right to publish the results of his/her research activities, provided that the publication does not prejudice the rights of the University over the protection of the results.

The Research Fellow therefore undertakes to promptly notify the achievement of the results to the tutor, who shall verify the existence of any such prejudice.

In any case the Research Fellow undertakes to sign a specific Undertaking of Confidentiality with the referred Structure, which will be annexed to the contract.

Art. 9 - Non-accumulation, incompatibility, leave

1. The position of research fellow is incompatible with the following positions:

a) fixed-term and full-time staff employed by the bodies listed in art. 22 para. 1 of Italian Law no. 240/2010;

b) persons employed by any private bodies, on a fixed term, permanent or part-time basis; For staff of any Public Administration other than those listed in letter a) refer to the provisions of point 2 below;

c) persons with fixed-term research contracts with any university;

d) adjunct professors with official teaching responsibilities in degree programmes or specialisation schools in any university;

e) persons enrolled in any first, second or single cycle degree programmes, PhD programmes with scholarships or specialisation school. Self-funded research contracts are compatible with enrolments in non-medical specialisation schools, for which no study grant or contract is foreseen or master's degree, only where authorised in advance by the structure Director, and having sought the opinion of the tutor.

f) persons awarded research fellowships at any other body.

2. Employees of public administrations other than those listed in point a) with a fixed-term, permanent or part-time contract shall take unpaid leave of absence for the whole period of the research contract.

3. Freelance professional activities are compatible with the research fellowship contract where authorised in advance by the Board of the structure, with the motivated opinion of the tutor and having verified that the activities in addition to the research fellowship do not prejudice the regular execution of the contract. 4. The accumulation of the research fellowship contract with study grants awarded for any purpose is not permitted, with the exception of those granted by national or foreign institutions for the purposes of integrating the research activities with study periods abroad.

5. The above requirements must be possessed from the moment of entry into force of the contract. The winning candidate shall sign a specific affidavit undertaking to notify the department of any variations in the declared situations as soon as they occur.

Art. 10 - Forfeiture

Any candidate who within the deadline notified by the structure does not sign the contract, unless for promptly and duly demonstrated reasons of health or force majeure, shall forfeit the right to sign the contract.

Art. 11 - Reference norms

For any matters not laid down in this call for applications, refer to the Regulation on Research Fellows issued by the University of Bologna by Rectoral Decree no. 416 dated 19.04.2011 and other statutory regulations in force.

The personal data provided by the candidates in their applications, pursuant to Regolamento (UE) 2016/679 and of the D.Lgs. 196/2003 e ss.mm.ii, shall be processed for the purposes of managing the selection procedure and the contract.

The structure reserves the right to revoke this call for applications due to supervening reasons of public interest or in the event of a change in the factuable situation not foreseeable at the time of the adoption of the provision.

The selection procedure manager is Dott.ssa Daria Zizzola.

For information of an administrative nature on this announcement please contact Amministrazione del Dipartimento di Matematica, e-mail : dipmat.amministrazione@unibo.it , tel. +39 051 20 9 4408.

This call for applications will be published on the University Portal, the MIUR website and the European Mobility Portal.

Date,

THE HEAD OF DEPARTMENT Prof.ssa Annamaria Montanari

Document signed with digital signature pursuant to Legislative Decree 7 March 2005, n. 82 and of the D.P.C.M. 22 February2013 and subsequent amendments.