ANNOUNCEMENT OF PUBLIC SELECTION FOR 6 RESEARCH GRANTS
(Italian law No.240, Art.22, 30 December 2010)

Description

The Scuola Normale Superiore announces a selection, based on work to date and interview, for 6 grants for the carrying out of research activities at the Faculty of Sciences in the context of a post-doctoral programme of several years' duration.

In particular, the six research grants will be awarded to the six most deserving researchers selected by the judging Commission for one or more of the following scientific fields, with reference to the scientific-disciplinary sectors indicated beside each one (with no obligation for all the ten different scientific fields specified to be awarded a grant):

1) Entanglement creation and distillation on quantum networks: theory and applications to quantum sensing (FIS/03)
2) Multi-wavelength, data-driven models of high redshift galaxies and active galactic nuclei, and their impact on the intergalactic medium (FIS/05)
3) Theoretical Aspects of the Fundamental Interactions and Early Cosmology (FIS/02)
4) Phenomenological Aspects of the Fundamental Interactions and Early Cosmology (FIS/02)
5) Mechanisms of disease in preclinical models of brain disorders (BIO/09)
6) Design and optimization of new theranostic agents through machine learning and advanced molecular modelling (CHIM/02)
7) Measurements on charm and beauty hadrons at the LHCb experiment in high-rate conditions (FIS/01)
8) Real-time reconstruction of data from LHCb-Upgrade experiment with a distributed FPGA system (FIS/01)
9) Modeling Molecules in Complex Environments (CHIM/02)
10) Human-Centered AI: combining human cognitive models and explainable machine learning for hybrid decision making. Theory, algorithms, and use cases in healthcare (INF/01, ING-INF/03, ING-INF/05, M-PSI/01, M-PSI/02, M-PSI/05, M-PSI/06, M-PSI/08)

Duration of contracts: 2 years for each contract

Annual gross remuneration, inclusive of all taxes: € 40,000 for each contract

Application deadline: January 15th, 2024 at 04:00 PM (Italian time)

Information about the selection procedure can be found below. Applicants are advised to read the official announcement (Bando) and to follow exclusively its detailed instructions should they decide to apply.

Requisites

The research grants may be requested by applicants in possession of a PhD or equivalent in the scientific field that they choose, on submission of their online application, from among the ten scientific fields specified.
Applications are also welcome from those in possession of a qualification attained abroad and recognised as being equivalent to the above mentioned Italian qualification.

A knowledge of the English language is also essential for carrying out the research activities.

**How to apply**

Applicants must apply for a specific and single scientific field among those specified above. Once the application for a specific position has been submitted, it will not be possible to apply for one of the other scientific fields.

Applicants with all the aforementioned requisites who wish to participate in the selection process must submit their application exclusively online, using the online dedicated PICA procedure at the following link: [https://pica.cineca.it/sns](https://pica.cineca.it/sns)

The PICA app can be accessed via SPID, by choosing the institution “Scuola Normale Superiore” from the page of available federations; alternatively, the procedure will necessarily require an e-mail address in order to register into the system.

Once identified/registered and once the procedure relating to this selection has been accessed, applicants must also upload as attachments, through the online PICA procedure, exclusively in PDF format, the following documents:

a) a non-authenticated photocopy of a valid identity document;

b) their scientific-professional CV stating the qualifications that they intend to submit for the assessment and their complete scientific production;

c) a maximum of 12 publications selected by the applicants from their complete scientific production. Each publication must occupy a space of not more than 30 megabytes. The PhD thesis must be considered as one of the 12 publications, if attached to the application;

d) a list of the 12 publications submitted, including the PhD thesis if attached to the application (see letter c) above), compiled using the form attached to the call herein (attachment B), which will be made available through the PICA procedure;

e) a proposal for a two-year research project relating to the chosen subject area, to be submitted for assessment using the form attached to the call herein (attachment C), which will be made available through the PICA procedure;

f) in the case of a qualification attained abroad that has not been certified as being equivalent to the Italian PhD, a scanned copy of the qualification together with a translation in Italian or English, showing the grades obtained in any individual examinations taken, with a declaration that the translation conforms to the original text, utilising the form attached to the call herein (attachment A), made available through the online PICA procedure in both Italian and English;

g) scanned copies of any qualifications, among those featured in their CV, and/or documents that vouch for them, that they intend to submit for the purposes of the selection.

Until the deadline for the submission of applications, the procedure can save any data inserted in draft mode, enabling their modification and/or integration.

By the established deadline, applications for participation in the selection must be filled in definitively in all their parts, signed, on pain of exclusion, in one of the modes indicated by the online procedure, and submitted – together with all the attachments – by means of the same online procedure.
No signature will be required when submitting the application only if the SPID is used to access procedure.

The date of online submission will be certified by the PICA procedure; applicants will be notified of the receipt of their applications and their subsequent registration by means of two separate e-mail messages. Each application will be attributed a separate identification number (application ID) and a registration number, both visible inside the application; the application ID must be used, together with the call code 23-AR-UNICO-SCIENZE-46, for any subsequent communications.

Once applications have been submitted online and the confirmation of the online PICA procedure has been received, it will no longer be possible to access them in order to modify them; they may only be withdrawn using the function “ritira/withdraw” on the initial page of the procedure. Applicants can, however, submit a new application. After the deadline for submission, the online procedure will no longer permit access or the online transmission of applications. Please note that the online procedure may undergo temporary suspensions for technical reasons.

**No other form of transmission of applications and/or documentation for participation in the selection is allowed other than those indicated above.** Solely in the case of proven and certified technical unavailability of the online PICA procedure, the Scuola Normale reserves the right to accept admission applications and/or supporting documentation submitted in other modes, provided they are transmitted before the call deadline.

**Technical instructions** for completing the application form are available on the Scuola Normale’s website.

**Reference Letters**

Applicants may also indicate in their application the names and e-mail addresses of a maximum of 2 lecturers or researchers from universities in Italy or abroad or from research institutes, from whom the Scuola Normale, by means of the online PICA procedure, will request a letter of reference in support of the applicant. The letters of reference must be submitted not later than 23:59 (Italian time) of 19 January 2024.

**Interview**

The Committee may decide to conduct face-to-face interviews or online interviews with the admitted applicants. In any case, the online interview will be permitted to applicants who live permanently outside Italy or are domiciled abroad for work, study or research and request an online interview instead of a face-to-face interview. Applicants who are unable to attend an on-site interview for any other reason can request an online interview and the Committee will decide whether or not to permit it.

Applicants attending an online interview will have to comply with the guidelines on how to conduct online interviews, available on the website of the Scuola Normale, on pain of exclusion.

For the interview, applicants must show a valid identification document; otherwise they will not be permitted to take part in it.

Applicants who submit the wrong contact details, miss the connection on the date and at the time communicated by the Administration or fail to submit an identification document forfeit their right to participate in the interview and consequently in the selection process.

The Scuola Normale is not responsible for any technical problems that may arise during the interview.
Contact details for further information

For further administrative information about the application procedure and the relative documentation, or about the selection process itself, please contact the Servizio Personale a contratto (the Service for Personnel under contract) (e-mail job.opportunities@sns.it).

For any technical problems, applicants must use exclusively the link “Per problemi tecnici contatta il supporto” - “For technical problems contact the online help desk” - visualised in the section at the foot of the page of the web site https://pica.cineca.it/sns/
Attachment A

TRANSLATION AND SELF DECLARATION OF STUDY DIPLOMA ATTAINED ABROAD
AND OF ANY EXAMINATIONS TAKEN

I, the undersigned (surname and name) ____________________ born in ____________________ on
____________ resident in _____________________ (Province____) street ____________________
no.___ C.A.P. (postal code) __________ non-Italian State, if appropriate ________________

having attained a PhD abroad for which a declaration of equivalence to the Italian PhD has not yet been
requested and obtained,

ATTACH the copy of the study diploma attained abroad, and

HEREBY DECLARE

for the purposes of participation in the selection process, under my own responsibility, pursuant to arts.46
and 47 of D.P.R. 445/2000 and subsequent amendments thereto, and aware of the penal sanctions as
specified in art.76 of the same decree in the case of false declarations, that the following translation of
the study diploma attained abroad, and of any related examinations taken, is an exact replica of
the original itself:

Denomination of PhD attained: ______________________ Issued by the University of _____________
on ___/__/____ Any final assessment attained: ______________________ Title of PhD: ______________

List of any examinations taken (course title; year in which taken and assessment attained)

a) Examination of________________________ - year ________ - assessment __________

b) Examination of________________________ - year ________ - assessment __________

c) Examination of________________________ - year ________ - assessment __________

d) Examination of________________________ - year ________ - assessment __________

e) Examination of________________________ - year ________ - assessment __________

f) Examination of________________________ - year ________ - assessment __________

g) Examination of________________________ - year ________ - assessment __________

h) Examination of________________________ - year ________ - assessment __________

i) Examination of________________________ - year ________ - assessment __________

j)  ........

Etc.

Date _______________  Legible signature

_______________________
LIST OF PUBLICATIONS SUBMITTED

I, the undersigned (surname and name) __________________________ born in ______________________ on ________ resident in _______________________ (Province____) street____________________ no.___ C.A.P. (postal code) _________ non-Italian State, if appropriate ________________

HEREBY SUBMIT

the following publications, (a maximum of 12, including the PhD thesis), for assessment purposes:

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<th>No.</th>
<th>Type of scientific publication (article, monograph, contribution in volume etc.)</th>
<th>Author/s</th>
<th>Title of publication (of the article/contribution in volume/item ...) and reference (ISBN )</th>
<th>Title of the journal/volume/dictionary containing the article/contribution/item and reference (ISSN-DOI-ISBN)</th>
<th>Year of publication</th>
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To this end, I, the undersigned, under my own responsibility, pursuant to arts.46 and 47 of D.P.R. 445/2000 and subsequent amendments thereto, and aware of the penal sanctions as specified in art.76 of the same decree in the case of false declarations,

DECLARE

a) that the copies of the publications indicated in the above list, to be uploaded exclusively onto the PICA platform, are exact replicas of the originals in my possession and that they
have already been published as attested in the application, save for the provisions of the following point;

b) *(if applicable)* that the publications indicated in numbers __________ of the above list are definitive copies of manuscripts accepted for publication, and in particular:

1) for publication no. ___ of the list:
   - [ ] I declare that it was accepted by the Editor _____________________ on (date) __________ or else
   - [ ] I attach an attestation of its acceptance by the Editor __________ issued on (date) __________

2) for publication no. ___ of the list:
   - [ ] I declare that it was accepted by the Editor _____________________ on (date) __________ or else
   - [ ] I attach an attestation of its acceptance by the Editor __________ issued on (date) __________

   …etc.…

Date ____________  
Legible signature  
_______________________
PROPOSAL FOR RESEARCH PROJECT

DR. ____________________________________________
(name and surname of applicant)

CHOOSEN RESEARCH FIELD (indicate the research field applied for among those specified in art. 1 of the call):
________________________________________________________________________________

TITLE OF THE TWO-YEAR RESEARCH PROJECT (brief title of the project):
________________________________________________________________________________

OBJECTIVES, CONTENT AND FIELD OF ACTION OF THE PROJECT (brief description, of no more than 2 pages):
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PLAN OF ACTIVITIES (stages and/or times of carrying out and management of the proposed research project, to be outlined in no more than half a page):
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FURTHER INDICATIONS CONSIDERED USEFUL (no more than half a page):
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___________________________________________________________________________________________

Place ___________, date _____________

______________________________
(legible signature)