



PhD PROGRAMME IN PHYSICS
ACADEMIC YEAR 2026/2027 (42ND CYCLE)
in agreement with National Institute for Nuclear Physics

Coordinator professor *Massimo D'Elia*

Administrative headquarters: Department of Physics
(<https://www.df.unipi.it/en/>)

SELECTION PROCEDURES

Total no. of positions with grant 5

FISICA01_B	Type of selection procedure Single ranking list for research project		
	No. of available positions with grant 1 of which		
	No.	Funding organisation / Partner institution	Subject / Research project (if any)
	Positions with grant		
	1	Department of Physics of the University of Pisa, "THz-FIR Colour Imaging of Skin Condition Based on Analysis of Its Thermal Emission", acronimo: Thz-Skin HORIZON-EIC-2025-PATHFINDEROPEN GA N: 101257203, codice progetto: "UE_TNz-Skin_H_Path_101257203_Pitanti", CUP: I53C25003700006.	Development of hyperspectral thermomechanical detectors in the THz spectral region
FISICA02_B	Type of selection procedure Single ranking list for research project		
	No. of available positions with grant 1 of which		
	No.	Funding organisation / Partner institution	Subject / Research project (if any)
	Positions with grant		
	1	Department of Physics of the University of Pisa	Measurements of neutrino oscillations at the Icarus experiment at Fermilab
FISICA03_B	Type of selection procedure Single ranking list for research project		

	No. of available positions with grant 2 of which		
	No.	Funding organisation / Partner institution	Subject / Research project (if any)
	Positions with grant		
	2	Department of Physics of the University of Pisa, Fondo italiano per la scienza - Bando FIS 3 progetto FIS-2024-05507 dal titolo: Bootstrapping Quantum Field Theories, acronimo: QBOOT ERC PE2 Fundamental Constituents of Matter, “469999_FIS3_VICHI_2024-05507-QBOOT”, CUP: I53C25002240001	Analytic and Numerical Bootstrap Methods in Quantum Field Theory
FISICA04_B	Type of selection procedure Single ranking list for research project		
	No. of available positions with grant 1 of which		
	No.	Funding organisation / Partner institution	Subject / Research project (if any)
	Positions with grant		
	1	Department of Physics of the University of Pisa	Theoretical investigation of frontier quantum opto-electronic devices based on innovative materials
NB: For the above-mentioned selection procedures, candidates who, on the closing date of the Call for applications, are employed under a subordinate employment contract with a public body, for a duration at least equal to that of the PhD programme, may choose whether to: 1. <u>participate in the selection as a public employee, thereby automatically waiving the doctoral grant;</u> 2. <u>participate in the selection for a position with grant, without declaring their status as a public employee at the application stage.</u> Applicants who are public employees, in the case referred to under point 1, must declare their status during the above-mentioned online application procedure by selecting the corresponding option in the dedicated field available on the “Alice” platform https://www.studenti.unipi.it. Such candidates must also submit a self-declaration certifying their employment with the relevant public body, in accordance with Annex 1 to the Call for applications. Any applicant who, when submitting the online application, declares that they wish to participate as a public employee shall automatically waive the grant, and the provisions governing the ranking list set out in Article 5 of the Call shall apply. This choice is irrevocable and <u>may not be changed at a later stage.</u>			

The information below applies to all the selection procedures indicated above

ADMISSION REQUIREMENTS (*Article 3 of the Call for applications*)

Master’s Degree (LM) /Second Degree (Specialistica-LS) (or Old system University Degree): **ALL**

or
equivalent academic qualification in accordance with *Ministerial Decree of 9 July 2009* **to be obtained by 31 October 2026.**
In the event that the degree has not yet been awarded by the deadline of the Call for applications, the candidate must attach a list of the examinations taken, including the corresponding marks.

Important: In this regard, during the online application procedure for the selection, the candidate must attach a self-declaration concerning the degree already obtained, or to be obtained, drawn up in accordance with Presidential Decree no. 445/2000, as per Annex 2 to the Call for applications.

SELECTION METHODS AND CRITERIA (Article 4 of the Call for applications)

Curriculum vitae

The CV, duly signed and accompanied by a photocopy of a valid identity document, must be uploaded exclusively during the online application procedure for the selection, and must outline the candidate's educational background, as well as their professional and research experience. **Candidates are advised to submit any documentation deemed useful for the purposes of assessing the CV**, in particular:

- a list of exams taken during the candidate's university career, with the relative marks obtained in each exam as part of the Master's Degree programme;
- participation in schools and/or other educational or research activities, and any publications;
- an abstract of the Master's Degree thesis.

Written test

Only for selection **FISICA04_B**

The written examination may **only be taken in person** at the Department of Physics of the University of Pisa. The test is intended to assess the candidate's academic background and may be taken, at the candidate's choice, in either Italian or English.

The exam will include a cultural assessment on general physics topics and/or a contextualized dissertation with reference to a current line of research, and on how this line can be developed into a project.

Interview

The interview shall assess the candidate's knowledge, aptitude for research, willingness to undertake training pathways in Italy and abroad, and interest in further scientific study.

The interview must be broad and in-depth, and of a suitable duration to allow the committee to make a detailed assessment of the level of preparation and scientific potential of the candidate. This exam will also include an assessment of the English language skills

Videoconferencing **YES**

Candidates wishing to take the interview by videoconference must upload the VIDEO Annex to the Call for applications **exclusively during the online application procedure for the selection**. Requests received after the deadline of the Call for applications (**10 August 2026**) shall be submitted to the Selection Committee, which will assess whether to accept them in light of the technical time required to organise the interview by videoconference.

Selection **FISICA01_B** **FISICA02_B** **FISICA03_B**

	Minimum score	Maximum score
CV	18	30
Candidates who have obtained a score of at least 18 out of 30 points shall be admitted to the interview		
Interview	42	70
Eligibility is achieved with a minimum score of 60 out of 100 points		

Selection **FISICA04_B**

	Minimum score	Maximum score
CV	0	20
Written test	24	40
Candidates who have obtained a score of at least 24 out of 40 points shall be admitted to the interview.		
Interview	24	40
Eligibility is achieved with a minimum score of 48 out of 100 points		

SCHEDULE OF THE TESTS

The tests may take place in the period **between 14 and 30 September 2026**.

The schedule of the tests, for each of the selections below, will be published **by 24 July 2026** at <https://www.unipi.it/bando-dottorato>, including the indication of the venue where they will be held.

RANKING LIST AND ENROLMENT

Article 5 of the Call for applications sets out:

- the procedures for drawing up the ranking list
- the date of publication of the ranking list
- the procedures and deadlines for enrolment
- the procedures and deadlines for subsequent admissions from the ranking list.

Important: Subsequent admissions from the ranking lists, after 6 October and until 31 December 2026, are permitted only for “open” grants (i.e. those without a specific research topic).

In the other selection procedures, as they involve subject-based grants, any unassigned positions at the end of the third round of admissions from the ranking list will be made available by means of a specific notice, to be issued by Rector’s Decree in November. Such notice will be reserved for eligible candidates suitably placed in the ranking lists of the selection procedures already completed and will be published at <https://www.unipi.it/didattica/corsi/dottorati/>.

With regard to the publication of the notice and the procedures for the reallocation of the grants, **no individual email communication will be sent to eligible candidates**, as all relevant information will be provided upon publication of the ranking lists.

INFORMATION ON THE TEACHING ACTIVITIES OF THE PROGRAMME

Educational project and objectives of the programme:

<https://www.unipi.it/en/education/courses/phd-programmes/physical-chemical-mathematical-and-biological-sciences/physics/>

PhD programme website:

<https://phd2.df.unipi.it/en/home-2/>

PhD programme regulations:

<https://www.unipi.it/wp-content/uploads/regdottfisica.pdf>