



UNIVERSITÀ
DI PISA

PhD PROGRAMME IN MATHEMATICS
ACADEMIC YEAR 2026/2027 (42ND CYCLE)

Coordinator professor *Roberto Frigerio*

Administrative headquarters: Department of Mathematics
(<https://www.dm.unipi.it/>)

SELECTION PROCEDURES

Total no. of positions with grant 11

MATE01_A	Type of selection procedure single ranking list		
	No. of available positions with grant: 4 of which		
	No.	Funding organisation / Partner institution	Subject / Research project (if any)
	Positions with grant		
	2	University of Pisa	
1	Department of Mathematics of the University of Pisa, Department of Excellence 2023/2027		
1	University of Pisa Department of Mathematics of the University of Pisa, Department of Excellence 2023/2027		

MATE02_A	Type of selection procedure single ranking list for research project		
	No. of available positions with grant: 2		
	No.	Funding organisation / Partner institution	Subject
	Positions with grant		
2	Department of Information Engineering of the University of Pisa	Ergodic theory of dynamical systems	
For further information you may contact Professor Claudio Bonanno at claudio.bonanno@unipi.it			

MATE03_A	Type of selection procedure single ranking list for research project		
	No. of available positions with grant: 1		
	No.	Funding organisation / Partner institution	Subject
	Positions with grant		
1	Department of Mathematics of the University of Pisa	Algebraic and arithmetic geometry	
For further information you may contact Professor Giulio Bresciani at giulio.bresciani1@unipi.it			

MATE04_A	Type of selection procedure	
	single ranking list for research project	
	No. of available positions with grant: 2	
	No.	Funding organisation / Partner institution
Positions with grant		
2	Department of Mathematics of the University of Pisa	Geometry and topology of higher-rank Teichmüller spaces
For further information you may contact Professor Andrea Tamburelli at andrea.tamburelli@unipi.it		

MATE05_A	Type of selection procedure	
	single ranking list for research project	
	No. of available positions with grant: 2	
	No.	Funding organisation / Partner institution
Positions with grant		
2	Department of Mathematics of the University of Pisa	Geometric and variational properties of measures satisfying PDE constraints
For further information you may contact Professor Adolfo Arroyo Rabasa at adolfo.rabasa@unipi.it		
<p>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:</p> <ol style="list-style-type: none"> 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> <p>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></p>		

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 they should include:

- a) *curriculum vitae*;
- b) Master's thesis or, for candidates who have not yet obtained the degree, a summary of it;
- c) Diploma Supplement or similar documentation relating to the exams taken throughout their entire university career, including exam grades and the final grade for both the Bachelor's Degree and Master's Degree, if already obtained (or equivalent qualifications);
- d) a copy of any publication.

Only for MATE01_A: in their CV, candidates should submit a short paragraph (maximum 1 page) outlining the reasons for their application to the PhD programme in Mathematics at the University of Pisa.

Only for MATE02_A: in their CV, candidates should submit a short paragraph (maximum 1 page) outlining the reasons for their application to the PhD programme on the subject "Ergodic theory of dynamical systems" under the supervision of Professor Claudio Bonanno from the Department of Mathematics of the University of Pisa (claudio.bonanno@unipi.it).

Only for MATE03_A: in their CV, candidates should submit a short paragraph (maximum 1 page) outlining the reasons for their application to the PhD programme on the subject "Algebraic and arithmetic geometry" under the supervision of Professor Giulio Bresciani from the Department of Mathematics of the University of Pisa (giulio.bresciani1@unipi.it).

Only for MATE04_A: in their CV, candidates should submit a short paragraph (maximum 1 page) outlining the reasons for their application to the PhD programme on the subject "Geometry and topology of higher-rank Teichmüller spaces" under the supervision of Professor Andrea Tamburelli from the Department of Mathematics of the University of Pisa (andrea.tamburelli@unipi.it).

Only for MATE05_A: in their CV, candidates should submit a short paragraph (maximum 1 page) outlining the reasons for their application to the PhD programme on the subject "Geometric and variational properties of measures satisfying PDE constraints" under the supervision of Professor Adolfo Arroyo Rabasa from the Department of Mathematics of the University of Pisa (adolfo.rabasa@unipi.it).

For all selections: The candidate must also indicate, **during the online application procedure for the selection**, at least 2 referees and their contact details (email addresses and telephone numbers), consisting of academics and scholars in Mathematics willing to provide references, who must upload their reference letter **by 23:59 (CEST) on the deadline of the Call for applications (8 June 2026)**, in accordance with the instructions that will be sent directly to them by email.

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. Furthermore, the interview will assess the candidate's basic grounding in mathematics, as well as the research interests developed during their studies.

Only for MATE02_A: the interview is finalised to assess the candidates' mathematical knowledge concerning the subject of the position, their attitude towards research, and their interest in pursuing research on the subject.

Only for MATE03_A: the interview will be structured to assess the candidate's aptitude and interest in conducting research in the aforementioned project, which includes:

- Algebraic geometry (algebraic varieties, scheme theory);
- Arithmetic geometry (rational points on varieties).

Only for MATE04_A: the interview will be structured to assess the candidate's aptitude and interest in conducting their research within the scope of the aforementioned project, which includes:

- Differential geometry (harmonic maps, surfaces in pseudo-Riemannian spaces, complex structures, Kähler, hyperkähler, etc.);
- Teichmüller theory.

Only for MATE05_A: the interview will be structured to assess the candidate's aptitude and interest in developing their research within the scope of the aforementioned project, which includes:

- Calculus of Variations (Young measures, PDE restrictions, BV functions);
- Geometric Measure Theory (structure of currents and varifolds);
- Partial Differential Equations (compensated compactness, functional inequalities).

For selection **MATE01_A**:

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 (8 June 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.

For selections: **MATE02_A**, **MATE03_A**, **MATE04_A**, **MATE05_A**:

Interviews will only take position remotely.

	Minimum score	Maximum score
<i>Curriculum Vitae</i>	24	40
Candidates who have obtained a score of at least 24 out of 40 points shall be admitted to the written test.		
<i>Interview</i>	30	60
Eligibility is achieved with a minimum score of 54 out of 100 points.		

SCHEDULE OF THE TESTS

The tests may take place in the period **between 22 June and 6 July 2026**.

The schedule of the tests, for each of the selections below, will be published **by 25 May 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 17 September and until 31 December 2026, are permitted only for “open” grants (i.e. those without a specific research topic), namely: **MATE01_A**.

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/didattica/corsi/dottorati/scienze-fisiche-chimiche-matematiche-e-biologiche/matematica/>

PhD programme website:

<https://www.dm.unipi.it/phd/>

PhD programme regulations:

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