



PHD PROGRAMME TABLE

Call for applications for the admission to the PhD programmes (42nd cycle) - A.Y. 2026/2027 First round

PROGRAMME'S NAME	PHYSICS
ASSOCIATED PARTNERS <i>Pursuant to art. 3 para 2 lett. b) of the MD n. 226/2021</i>	Istituto Nazionale di Fisica Nucleare - INFN
DURATION	3 years
PROGRAMME START DATE	01/11/2026 (DD/MM/YYYY)
LANGUAGES	Italian, English
COORDINATOR	Prof. Alessandro Gabrielli (alessandro.gabrielli@unibo.it)
PhD POSITIONS	6
ADMISSION PROCEDURE	Qualifications evaluation Oral examination

Available Positions and Scholarships

Pos. n.	Financial Support	Description	Positions linked to research topics
1	PhD Scholarship	Funded by the University of Bologna general budget and by the Department of Physics and Astronomy "Augusto Righi" with funds made available by Prof. Silvia Pascoli's ERC project - HEU_2024_DARKSHUNT_PASCOL_DS_01 - CUP J33C24003400006	Theory and phenomenology of astroparticle physics
2	PhD Scholarship	Funded by the University of Bologna general budget and by the Department of Physics and Astronomy "Augusto Righi" with funds made available by Prof. Silvia Pascoli's ERC project - HEU_2024_DARKSHUNT_PASCOL_DS_01 - CUP J33C24003400006	Searches of dark sectors at NA64
3	PhD Scholarship	Funded by the University of Bologna general budget and by the Department of Physics and Astronomy "Augusto Righi" with funds made available by Prof. Silvia Pascoli's ERC project - HEU_2024_DARKSHUNT_PASCOL_DS_01 - CUP J33C24003400006	Dark sector models and their cosmological implications
4	PhD Scholarship	Funded by the Department of Physics and Astronomy "Augusto Righi" with funds made available by the ERC project - 2022- COG Horizon Europe WaveNets GA n° 101087692 CUP J33C24003440006 PI Prof. Dalmonte	Complexity of quantum many-body systems, and applications to quantum information theory
5	PhD Scholarship	Funded by the Department of Physics and Astronomy "Augusto Righi" with funds made available by the ERC project - 2022- COG Horizon Europe WaveNets GA n° 101087692 CUP J33C24003440006 PI Prof. Dalmonte	Data science and quantum simulators: theory and applications

6	PhD Scholarship	Funded by the Department of Physics and Astronomy "Augusto Righi" with funds made available by the ERC project - 2022- COG Horizon Europe WaveNets GA n° 101087692 CUP J33C24003440006 PI Prof. Dalmonte	Characterize and classify many body phenomena from data
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The yearly gross amount of the scholarships awarded for the PhD Programme in "Physics" is €18,341.04.

All winners of PhD positions must fulfil the study and research obligations decided by the Academic Board, as well as the obligations set out in the relevant regulations, in the call for applications, in the funding schemes and in any agreements relating to specific positions.

Admission Exams

	DATE AND TIME	RESULTS
Qualifications evaluation	Applicants' participation is not required	Available from 08/04/2026
Oral examination	Date: starting from 16/04/2026 – 2.00 p.m. CEST Place: Remotely, using Microsoft Teams	Available from 22/04/2026

The results of the qualifications evaluation, as well as the oral examination detailed schedule, shall be available on the webpage [Studenti Online](#) (select "requests in progress" > "see detail" and open the .pdf file at the bottom of the page). No personal written communication will be sent to applicants concerning the examinations results.

During the oral examination, applicants will express their interest in one or more PhD positions linked to specific research topics.

Required and Supporting Documents to be attached to the application

Only documents in Italian or English will be considered valid and will be assessed by the Admission Board. Identity documents and diplomas/degree certificates issued in a language other than Italian or English must be accompanied by an official translation. The translation must be carried out by an authorized body or by the awarding university. Only qualifications obtained in the last 5 years will be taken into account, with the exception of university degrees. The Admission Board will assess the relevance of the supporting documents to the PhD programme.

REQUIRED DOCUMENTS	
Identity document	Valid identity document with photo (i.e. identity card, passport)
Curriculum Vitae	<p>Applicants must draw up their Curriculum Vitae according to the Curriculum Vitae form, downloadable in .docx from the University website (select the PhD Programme → "More information", then check "Notices" at the bottom of the page). Applicants not using the said form will be excluded.</p> <p>Experience attesting to the candidate's training and skills will be assessed in the Curriculum Vitae. Below is an indicative and non-exhaustive list of assessable experience:</p> <ul style="list-style-type: none"> - Postgraduate vocational programmes and/or specialisation programmes relevant to the PhD Programme - Teaching activity carried out at academic level - Research activity of any kind - whether basic, applied, translational, etc. - carried out in any capacity, including when covered by research grants, and as a staff member of research projects - Work activity - Curricular or non-curricular professional internships - Documents attesting the applicants's foreign languages proficiency - Study periods completed by applicants outside their countries of origin (e.g. Erasmus programme or other similar mobility programmes) - Other qualifications attesting the suitability of the applicants (scholarships, prizes, etc.)

	The template also includes the sections entitled “Field of interest in Physics” and “Motivation”. These must be filled in. Here the applicants are invited to describe their research interests and the reasons prompting the applicant to attend the PhD Programme
Degrees	Documents attesting the awarding of the first and second cycle degrees, the exams taken and the marks obtained (see Art. 3 of the Call for Applications)
SUPPORTING DOCUMENTS	
Thesis description	Description of the second cycle degree thesis, drawn up using the template Thesis Description , downloadable in .docx from the University website (select the PhD Programme → “More information”, then check “Notices” at the bottom of the page). The document cannot exceed a 2-pages length (A4, font size 11, single line spacing). It must be structured as follows: <ul style="list-style-type: none"> - State of the art and scientific background - Thesis abstract, detailing attained or foreseen results - Future development of the research activity begun with the thesis Graduands may submit a description of the thesis they are currently working on. Applicants awarded with a degree in a foreign institution, not including a research thesis as part of the programme, can submit a research proposal with the described structure.
Reference letter/s	No more than 3 reference letters signed by Italian and international academics and professionals in the research field, which do not form part of the Admission Board, attesting the suitability of the applicant and his/her interest in the scientific research. Letters shall be uploaded following the procedure on Studenti Online , detailed in the Call for Applications (Art. 3.2).
Publications	Lists of publications (i.e. monographs, articles on scientific journals), minor publications (conference papers, etc.), abstracts and posters presented during national and international conferences, etc., to be inserted in the relevant section of the Curriculum Vitae form .

Evaluation criteria*

Scores will be expressed in points out of 100, as follows.

1. Qualifications evaluation

Minimum score for admission to the oral examination: 30 points, Maximum score: 50 points

Second cycle degree (Master’s) final mark. Graduands shall be evaluated according to the Weighted Average Mark (WAM) - taking into account the exams not yet taken	10 points max
Publications	3 points max
Curriculum Vitae evaluation - applicants must use the Curriculum Vitae form	7 points max
Thesis description	15 points max
Personal statement	15 points max

2. Oral examination

Minimum score for eligibility: 30 points, Maximum score 50 points

English language proficiency	3 points max
Thesis description and research interests presentation	25 points max
General knowledge of the PhD programme’s main research topics and of the research topics linked to the available PhD positions	22 points max

Oral examination aims to assess the suitability of the applicant for scientific research as well as the general knowledge of the PhD programme’s main research topics and of the research topics linked to the available PhD positions.

The oral examination is carried out in English.

* Possible further evaluation criteria will be available on the [University website](#), selecting the relevant PhD Programme > “More information”.