



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

AREA
FORMAZIONE E DOTTORATO

PHD PROGRAMME TABLE

Call for applications for the admission to the PhD programmes (41st cycle) - A.Y. 2025/2026
Second round

PROGRAMME'S NAME	ASTROPHYSICS
ASSOCIATED PARTNERS Pursuant to art. 3 para 2 lett. b) of the M.D. n. 226/2021	Istituto Nazionale di Fisica Nucleare - INFN
DURATION	3 years
PROGRAMME START DATE	01/11/2025 (DD/MM/YYYY)
LANGUAGES	English
COORDINATOR	Prof. Andrea Miglio (andrea.miglio@unibo.it)
PhD POSITIONS	15
ADMISSION PROCEDURE	Qualifications evaluation Oral examination

Available Positions and Scholarships

Pos. n.	Financial Support	Description	Positions linked to research topics
1	PhD Scholarship	Totally funded by the University of Bologna general budget	Research topic to be chosen among those listed in the document PhDProjectAstrophysics41.pdf
2	PhD Scholarship	Totally funded by the University of Bologna general budget	Research topic to be chosen among those listed in the document PhDProjectAstrophysics41.pdf
3	PhD Scholarship	Totally funded by the University of Bologna general budget	Research topic to be chosen among those listed in the document PhDProjectAstrophysics41.pdf
4	PhD Scholarship	Totally funded by the University of Bologna general budget	Research topic to be chosen among those listed in the document PhDProjectAstrophysics41.pdf
5	PhD Scholarship	Funded by the Department of Physics and Astronomy with funds made available by Ferraro Donation (Donation for young students in Stellar Astrophysics by Christine Valdemoorle) and by PRIN 2017 prof. Ferraro	GENESIS: Characterizing the primordial structures in the heart of the Galaxy with JWST / GENESIS: Caratterizzazione delle strutture primordiali nel cuore della Galassia con JWST (more information can be found in the document GENESIS)
6	PhD Scholarship	Funded by the Department of Physics and Astronomy with funds made available by the project ERC CoG: Beloved-Field Evolution and Origin in Vast Extragalactic Domains, Ref. Prof. Annalisa Bonafede CUP J33C24003120006	Magnetic field evolution in galaxy clusters (more information can be found in the document ERC BELOVED)

7	PhD Scholarship	Funded by the University of Bologna general budget and by the Department of Physics and Astronomy with funds made available by the project ERC ECOGAL, Ref. Prof. Testi CUP J33C19000040006	Physical and chemical conditions for the formation of exoplanets and their atmospheres (more information can be found in the document ERC ECOGAL)
8	PhD Scholarship	Funded by the Department of Physics and Astronomy with funds made available by the project HEU_2021_REDCARDINAL_BELLI, CUP J33C21000420006	A Big Model for Big Data: forward modeling the colors of millions of galaxies (more information can be found in the document ERC RED CARDINAL)
9	PhD Scholarship	Funded by INAF – National Institute for Astrophysics	Research topic to be chosen among those listed in the document INAF OAS
10	PhD Scholarship	Funded by INAF – National Institute for Astrophysics	Research topic to be chosen among those listed in the document INAF OAS
11	PhD Scholarship	Funded by INAF – National Institute for Astrophysics	Research topic to be chosen among those listed in the document INAF IRA
12	PhD Scholarship	Funded by the Institute for Radio Astronomy - INAF IRA	Research topic to be chosen among those listed in the document INAF IRA
13	PhD Scholarship	Funded by the Institute for Radio Astronomy - INAF IRA	Unveiling the cosmic web with the most powerful low-frequency radio telescope (more information can be found in the document ERC ULU)
14	PhD Scholarship	Funded by INAF OAS Bologna – Astrophysics and Space Science Observatory	Assembly, integration, and testing techniques for ELT instrumentation (more information can be found in the document ELT instrumentation)
15	PhD Scholarship	Funded by INAF OAS Bologna – Astrophysics and Space Science Observatory	The large-scale environment of $z>6$ QSOs. (more information can be found in the document high-z QSOs)

Details of the available research lines can also be found on the PhD course website at: [2025 Call - fellowships and projects](#).

The yearly gross amount of the scholarships awarded for the PhD Programme in “Astrophysics” is €17,805.

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 17/07/2025
Oral examination	Date: starting from 24/07/2025 – 9.00 a.m. CEST Place: In presence, Sala Antonio Sollima 4E10, INAF, Via Gobetti 93/3, Bologna. Remotely, using Microsoft Teams	Available from 05/08/2025

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	No specific CV format is required
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 abstract	Abstract of the second cycle degree thesis . Graduates applicants may submit an abstract of the thesis to be defended. Abstracts cannot exceed 5,000 characters, including spaces and formula possibly used. The above figure does not include: the title of the thesis, the outline, references, and images such as graphs, diagrams, tables etc.
Reference letter/s	No more than 2 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)
Other documents	<ul style="list-style-type: none"> - 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 - Curricular and non-curricular training internships - Documents attesting the knowledge of foreign languages - 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.)

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

First (Bachelor's) and Second cycle degree (Master's) final mark. Graduates shall be evaluated according to the Weighted Average Mark (WAM)	30 points max
Publications	2 points max
Curriculum Vitae evaluation (e.g. thesis abstract, reference letters, other qualifications)	18 points max

2. Oral examination

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

General knowledge of the PhD programme's main research topics and of the research topics linked to the available PhD positions	50 points max
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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. During the oral examination, the applicant's English proficiency shall be assessed.

The oral examination is carried out in Italian or English.

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