DOCTORAL PROGRAMME
IN
PHYSICS AND ASTRONOMY

Director Prof. Giovanni Modugno

XLI cycle – academic year 2025/2026

SCIENTIFIC AREA	
ADMINISTRATIVE OFFICE	Department of Physics and Astronomy
PARTNER INSTITUTIONS	Istituto Nazionale di Fisica Nucleare (INFN)
WEB	www.fisica.unifi.it/dottorato
	POSITIONS AVAILABLE: 14 Positions with Scholarship: 12 Positions without Scholarship: 2* ** standard ranking only*
RANKING LIST FOR STANDARD POSITIONS SCHOLARSHIPS AVAILABLE: 9	**5** - University of Florence **3** - Istituto Nazionale di Fisica Nucleare (INFN) **1** - Dipartimento di Chimica "Ugo Schiff" **Thematic:** "Study of spin-electric effects in molecular magnetic materials of interest for quantum technologies by means of magnetic resonance spectroscopies" Funded by FIS2021 project ELECOS
RANKING LISTS FOR POSITIONS WITH SPECIFIC RESEARCH TOPICS SCHOLARSHIPS AVAILABLE: 3	**1** - Istituto Nazionale di Astrofisica - Osservatorio Astrofisico di Arcetri (INAF-OAA) **Thematic:** "Theoretical, observational astrophysics and related instrumentation and technology" **1** - Dipartimento di Chimica "Ugo Schiff" **Thematic:** "Quantum interfaces with single molecules" Funded by project ERC-2022-COG "Quantum interfaces with single molecules" (QUINTESSEnCE) - Grant Agreement n. 101088394 **1** - Department of Physics and Astronomy **Thematic:** "Experimental study of the supersolid phase in dipolar quantum gases" Funded by project ERC-2021-ADG "Supersolids: unveiling an extraordinary quantum phase of matter" (Supersolids) - Grant Agreement n. 101055319
STUDY/RESEARCH PERIODS ABROAD	3 months
DOCUMENTS REQUIRED FOR THE ADMISSION	• Copy of the Identification Document

<table>
<tr><td>(under penalty of exclusion)</td><td>

- Self-certification for qualifications obtained in Italy (laurea triennale, specialistica o magistrale o ciclo unico) with list of exams taken, credits and related grade, title of the thesis and graduation mark
(using this **template** or similar forms containing the required information)
- Qualifications obtained abroad (Bachelor's and Master Degrees or combined cycle Degree) with a list of all exams taken, credits and related grade, rating scale, title of the thesis and graduation mark

The same documentation except for the final mark must be submitted by those who will graduate within the 31/10/2025
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<tr><td>DOCUMENTS REQUIRED FOR THE EVALUATION</td><td>

MANDATORY

- Curriculum vitae et studiorum (maximum 2 pages, A4)
- Research project (maximum 2 A4 pages)

OPTIONAL

- List of publications
- Thesis abstract
- Other qualification documents
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<tr><td>RESEARCH PROJECT</td><td>The project may be written in Italian or English and must outline a possible research activity to be carried out within one of the research groups in the Department of Physics and Astronomy or in the linked Research Centers. A range of possible research thematics is published at www.fisica.unifi.it/research thematics
The candidate may present the same project for the standard scholarship and for any scholarship with specific research topic and separate ranking lists he/she intends to apply to, or alternatively may present different projects for each scholarship, indicating clearly to which scholarship each project refers.</td></tr>
<tr><td>INTERVIEW MODE</td><td>Remotely (videocall)

The interview is conducted in English language.</td></tr>
<tr><td>FURTHER INFORMATION</td><td>The interview will concern the research project, the master's thesis, the CV and the publications. Questions may be asked concerning the basic physics knowledge related to the project, to the thesis, and to the publications.</td></tr>
<tr><td>EVALUATION MARKS</td><td>

<table>
<tr><th>parameter</th><th>minimum score</th><th>maximum score</th></tr>
<tr><td>Research project, other titles, publications, curriculum vitae et studiorum, and list of taken exams with accompanying grades</td><td>30/120</td><td>45/120</td></tr>
<tr><td colspan="3">Applicants who obtain a mark of at least 30/120 will be admitted to the interview</td></tr>
<tr><td>Interview: discussion of the research project, thesis, other titles and publications</td><td>50/120</td><td>75/120</td></tr>
<tr><td colspan="3">Eligibility is achieved with a minimum score of 80/120</td></tr>
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EXAMINATION SCHEDULE		
	DATE	**TIME**
INTERVIEW	July 15th 2025	09:30 a.m.
The list of the candidates admitted to the interview and the final ranking will be published at the page **PhD courses**		