



DOCTORAL PROGRAMME

IN

PHYSICS AND ASTRONOMY

Director Prof. Raffaello D'Alessandro

XXXVII cycle – academic year 2021/2022

SCIENTIFIC AREA	
ADMINISTRATIVE OFFICE	Department of Physics and Astronomy
PARTNER INSTITUTIONS	Istituto Nazionale di Fisica Nucleare (I.N.F.N.)
POSITIONS AVAILABLE: 14 Positions with Scholarship: 12 Positions without Scholarship: 2* <i>* standard ranking only</i>	
RANKING LIST FOR STANDARD POSITIONS SCHOLARSHIPS AVAILABLE: 10	5 - University of Florence 3 - Istituto Nazionale di Fisica Nucleare (I.N.F.N.) 1 - I.N.A.F. - Osservatorio Astrofisico di Arcetri 1 - Department of Physics and Astronomy
RANKING LISTS FOR POSITIONS WITH SPECIFIC RESEARCH TOPICS SCHOLARSHIPS AVAILABLE: 2	1 - Sony Europe B.V. Thematic: "Joint Depth and Material Estimation with Transient Imaging" 1 - Nuovo Pignone Tecnologie S.r.l. Thematic: "Domain adaptation and active learning AI techniques in the context of regression, simulation and agnostic optimization of large industrial apparatuses and high energy physics experiments"
STUDY/RESEARCH PERIODS ABROAD	Not mandatory
DOCUMENTS REQUIRED FOR THE ADMISSION (under penalty of exclusion)	<ul style="list-style-type: none">• Copy of the Identification Document• Self-declaration for qualifications (bachelor's/Master's/combined cycle degree) obtained in Italy with a list of all exams taken and their mark, title of the thesis and graduation mark (download the form here make sure you fill in in all the fields)• Foreign qualification required to access with a list of all exams taken and their mark, title of the thesis and graduation mark. <p><i>The same documentation except for the final mark must be submitted by those who will graduate by 31/10/2021</i></p>
DOCUMENTS REQUIRED FOR THE EVALUATION	MANDATORY <ul style="list-style-type: none">• Curriculum vitae et studiorum (max 3000 characters, spaces not included)

	<ul style="list-style-type: none"> • Research project <p>OPTIONAL</p> <ul style="list-style-type: none"> • List of publications • Thesis abstract • Other qualification documents 																					
REFERENCE LETTERS	A section is provided in the online application to specify the e-mail addresses of two professors/researchers willing to provide information about candidates training path and activities performed within a scientific field related to the Ph.D. course.																					
RESEARCH PROJECT	The Research Project must be at most two A4 pages long. The Project may be written in Italian or English and must describe a possible research activity to be carried out within the three-year PhD course. The project will be evaluated for its coherence with the Doctoral themes of our PhD program and for its general and specific feasibility. It will also be used to ascertain the candidate's aptitude for research, even if it will not necessarily constitute his/her Thesis project.																					
EVALUATION PROCEDURE	<ul style="list-style-type: none"> • Evaluation of the curriculum, of the research project and of the other qualification documents • Interview <p>As detailed in the section below “Evaluation marks”.</p>																					
OTHER LANGUAGE FOR THE INTERVIEW	English																					
INTERVIEW MODE	Remotely (videocall)																					
EVALUATION MARKS	<table border="1"> <thead> <tr> <th>parameter</th> <th>minimum score</th> <th>maximum score</th> </tr> </thead> <tbody> <tr> <td>Research project</td> <td>2</td> <td>6/120</td> </tr> <tr> <td>Publication and other qualification documents</td> <td>–</td> <td>4/120</td> </tr> <tr> <td>Curriculum vitae et studiorum, and list of taken exams with accompanying grades</td> <td>–</td> <td>38/120</td> </tr> <tr> <td colspan="3">Applicants who obtain a mark of at least 32/120 in the evaluation of the above parameters will be admitted to the interview</td> </tr> <tr> <td>Interview: discussion of the research project, thesis, the qualification documents presented and publications</td> <td>48/120</td> <td>72/120</td> </tr> <tr> <td colspan="3">Eligibility is achieved with a minimum score of 80/120</td> </tr> </tbody> </table>	parameter	minimum score	maximum score	Research project	2	6/120	Publication and other qualification documents	–	4/120	Curriculum vitae et studiorum, and list of taken exams with accompanying grades	–	38/120	Applicants who obtain a mark of at least 32/120 in the evaluation of the above parameters will be admitted to the interview			Interview: discussion of the research project, thesis, the qualification documents presented and publications	48/120	72/120	Eligibility is achieved with a minimum score of 80/120		
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THEMATICS	The interview will concern the research project, the thesis work, and basic physics knowledge used in the thesis.																					
<p>Further information available at the following website page: https://www.fisica.unifi.it/vp-26-dottorato-in-fisica-e-astronomia.html</p>																						

EXAMINATIONS SCHEDULE

	DATE	TIME
INTERVIEW	September 6 th 2021	9:00 a.m.

The list of the candidates admitted to the interview and the final ranking will be published at the following web page: <https://www.unifi.it/p12018.html>