



UNIVERSITÀ  
DEGLI STUDI DI TRIESTE

Rettorato e Direzione Generale  
Sezione Ricerca e Dottorati  
Ripartizione Dottorati

LAST REVISED 27/06/2014

**PhD IN  
PHYSICS  
RESERVED PLACES FOR GRADUATED IN FOREIGN UNIVERSITIES**

**NOTE:** candidates applying for reserved places as outlined hereafter cannot apply for other places described in ATTACHMENT 4 – Physics

**NOTE:** This attachment provides only partial information. Exhaustive information, including how to register for the selection, is published in the Admission Announcement posted in the web page <http://www2.units.it/dott/en/> >> Admission Announcement.

<b>Deadline for online application</b>	<b>21 August 2014 11:30 a.m. (ITALIAN TIME)</b>
<b>Deadline for paying the exam registration (application) fee</b>	<b>21 August 2014</b>
<b>Deadline for submitting qualifications and publications plus the form <i>Integration to the Application</i></b>	<b>21 August 2014 11:30 a.m. (ITALIAN TIME)</b>
<b>Deadline for completion of the degree required for admission</b>	<b>21 August 2014</b>
<b>Video conference interview</b>	<b>10 September 2014 (appointment required)</b>
<b>Documents required</b> <i>(for further details see below "Weighting of the qualifications")</i>	<ol style="list-style-type: none"><li>1. Form "Integration to the application"</li><li>2. The following documents:<ol style="list-style-type: none"><li>d. i) certificate of the academic qualification;</li><li>ii) detailed <i>curriculum vitae et studiorum</i>, with a special focus on pre-PhD activities;</li><li>iii) GRE certificate (Graduate Record Examination) in physics or chemistry or mathematics;</li></ol></li><li>b. a degree transcript listing the examinations taken by the candidate, with marks and a short description of their content;</li><li>c. a brief summary of the master thesis, if applicable;</li><li>d. i) two letters of recommendation by professors or experts in the relevant field of research: the facsimile must be downloaded from: <a href="https://df.units.it/sites/df.units.it/files/pagina/allegati/Letter%20of%20recommendation_TEMPLATE_0_0.doc">https://df.units.it/sites/df.units.it/files/pagina/allegati/Letter%20of%20recommendation_TEMPLATE_0_0.doc</a> emailed directly by professors/researchers who know the candidate's work to <a href="mailto:dottorato.fisica@units.it">dottorato.fisica@units.it</a> subject:"Letter of reference concerning NAME SURNAME</li><li>ii) letter of intent;</li><li>e. publications</li></ol>

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IN BRIEF		
<i>Lines of research</i>		1 Nuclear and subnuclear physics
		2 Astrophysics
		3 Condensed matter physics
		4 Theoretical physics
		5 Medical physics and biophysics
<i>Administrative location</i>		University of Trieste
<i>Organizing Department</i>		Department of Physics
<i>Duration</i>		3 years
<i>Maximum number of months to be spent abroad by each PhD student</i>		maximum 18
<i>Official language</i>		English
<i>Language (alternative to Italian) partially used in PhD activities</i>		--
<i>Subject Area</i>	<i>main</i>	02
	<i>others</i>	
<i>Macro Research Fields</i>	<i>main</i>	02/A
	<i>others</i>	02/B; 02/C
<i>Scientific Disciplinary Sector</i>	<i>main</i>	FIS/01
	<i>others</i>	FIS/02, FIS/03, FIS/05, FIS/07
<i>Domain European Research Council</i>		PE
<i>ERC Panels</i>	<i>main</i>	PE2
	<i>others</i>	PE3, PE9
<i>Erasmus Subject Area Codes</i>	<i>main</i>	13.2
	<i>others</i>	13.5, 13.7
Information on the codes can be found online at: <a href="http://www2.units.it/dott/en/?file=DottBandi.inc">http://www2.units.it/dott/en/?file=DottBandi.inc</a> >> Admission Announcement and relative attachments (...) >> "Labelling" (file.xls)		

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PLACES, SCHOLARSHIPS, RESEARCH GRANTS AVAILABLE			
Total number of places available (		5	<b>N.B.:</b> Unassigned scholarships will be allocated to the PhD in Physics (ATTACHMENT 4)
without scholarship		0	
with scholarship		5	<b>N.B.:</b> Candidates who accept an earmarked scholarship are committed to the pre-assigned topic.
Scholarships/Research grants available with indication of the code, total number and funding body	[R/1] D/6	1	Department of Physics funded by INFN (Project title “Theoretical and experimental physics subject of INFN interest”)
	[R/1] D/7	1	Department of Physics funded by ELETTRA – SOCIETA’ SINCROTRONE TRIESTE S.C.p.a. di Interesse Nazionale ai sensi Legge 370 dd. 19/10/1999 (Project title “Experiments with synchrotron radiation”)
<b>NB:</b> Candidates have to list which scholarships they apply for by specifying the corresponding codes in the “Integration to the Application”.	[R/1] D/8	1	Department of Physics funded by ELETTRA – SOCIETA’ SINCROTRONE TRIESTE S.C.p.a. di Interesse Nazionale ai sensi Legge 370 dd. 19/10/1999 (Project title “Development of novel free electron laser radiation sources”)
	[R/1] D/9	1	Department of Physics funded by INAF – OSSERVATORIO Astronomico di Trieste (Project title “Galaxy formation and evolution with the square kilometer array”)
	[R/1] D/10	1	Department of Physics funded by INAF – OSSERVATORIO Astronomico di Trieste (Project title “Detection and orbital architecture characterization of planetary systems around coolstars”)
PhD students from foreign universities may be admitted with a joint supervision of their thesis		Yes	
Erasmus Mundus PhD students from foreign universities may be admitted on a joint supervision of their thesis		Yes	
Erasmus Mundus PhD students from foreign universities may be admitted on international mobility programmes		Yes	

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## THE SELECTION PROCEDURE

Academic qualification required: see Announcement: see Announcement (art. 2 - Requirements)	An equivalent foreign academic qualification awarded abroad  An academic qualification awarded abroad which is considered to be equivalent to the Italian degree that allows the holder to undertake PhD studies for duration, level and area of study		
Deadline for completion of the Degree required for admission	<b>21 August 2014 (deadline)</b>		
Assessment criteria	qualifications + video conference interview		
Maximum final score (the final score is based on the sum total of marks obtained in the interview plus the points given for qualifications and publications)		70/70	
Minimum final score required for eligibility		45/70	
Maximum score awarded for qualifications+publications		20/20	
Minimum score required for qualifications+publications		10/20	
<b>Weighting of the qualifications</b> <b>Unless the form "Integration to application" is presented, qualifications and publications cannot be assessed by the Examining Board. The form is available at:</b> <a href="http://www2.units.it/dott/en/?file=DottBandi.inc&amp;cod=1010">http://www2.units.it/dott/en/?file=DottBandi.inc&amp;cod=1010</a>	a	i) certificate of the academic qualification; ii) detailed <i>curriculum vitae et studiorum</i> , with a special focus on pre-PhD activities; iii) GRE certificate (Graduate Record Examination) in physics or chemistry or mathematics	max 6/20
	b	a degree transcript listing the examinations taken by the candidate, with marks and a short description of their content	max 4/20
	c	a brief summary of the master thesis, if applicable	max 4/20
	d	i) two letters of recommendation by professors or experts in the relevant field of research: the facsimile must be downloaded from: <a href="https://df.units.it/sites/df.units.it/files/pagina/allegati/Letter%20of%20recommendation_TEMPLATE_0_0.doc">https://df.units.it/sites/df.units.it/files/pagina/allegati/Letter%20of%20recommendation_TEMPLATE_0_0.doc</a> emailed directly by professors/researchers who know the candidate's work to <a href="mailto:dottorato.fisica@units.it">dottorato.fisica@units.it</a> subject: "Letter of reference concerning NAME SURNAME"	max 3/20
	e	ii) letter of intent  publications	max 3/20
Oral examination/interview score out of – maximum score		50/50	
Oral examination/interview score out of – minimum score		35/50	

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<i>Deadline for submitting qualifications and publications</i>	<b>21 August 2014</b>
<i>Qualifications and publications shall be submitted: (art. 5.1.4 of the PhD Announcement)</i>	- <b>as an attachment to the online admission application (upload), deadline 11:30 am Italian time</b> only for publications that are voluminous or not available in electronic format, as long as they are listed in the form "Integration to application" (digital format preferable): e-mail (scan documents, file zip maximum 10 MB) to <a href="mailto:dottorato.fisica@units.it">dottorato.fisica@units.it</a> deadline 24.00 p.m. (ITALIAN TIME)
<i>Videoconference interview</i>	<b>10 September 2014</b> you must request an appointment by email to <a href="mailto:dottorato.fisica@units.it">dottorato.fisica@units.it</a> before 5 September 2014
<i>Language(s) of the interview</i>	Italian/English
<i>Language(s) tested in the oral examination/interview</i>	English
<i>CEFR (Common European Framework of Reference for Languages)</i>	B2

WHO'S WHO	
<i>Chair</i>	Prof. Paolo Camerini – Department of Physics – University of Trieste - Phone N. 040/558.3379; fax 040/558.3350 e-mail <a href="mailto:camerini@trieste.infn.it">camerini@trieste.infn.it</a>
<i>Vice</i>	Prof.ssa Marisa Girardi - Department of Physics – University of Trieste – phone N. 040/3199 147 fax 040 3199 123 e-mail <a href="mailto:girardi@oats.inaf.it">girardi@oats.inaf.it</a>
<i>Web site</i>	<a href="http://df.units.it/?q=it/node/2897">http://df.units.it/?q=it/node/2897</a>
<i>Learning outcomes</i>	<p>Graduates will possess competency in basic principles of physics.</p> <p>Graduates will possess an advanced and deep knowledge of their own research area of specialization.</p> <p>Graduates will be highly skilled in using advanced scientific experimental/observational/computational/theoretical methods and/or tools appropriate to their area of specialization.</p> <p>The most important outcome of their PhD will be the ability to perform independent and innovative research, developing a critical thinking, the capability of working in an advanced and international research environment.</p> <p>They will be able to carry out an original scientific work at the leading edge of their field, producing a written dissertation.</p> <p>Graduates will be able to summarize about the main issues in their field and communicate the results of scientific research at a professional level as well as to other students.</p> <p>The research fields of activity of the Graduate Course are: Nuclear and subnuclear physics, Astrophysics, Condensed matter physics, Theoretical physics, Medical physics and biophysics.</p>

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<i>Job placement opportunities</i>	<p>The data on the employment of graduates are extremely positive, with high employment rates relative to the degree obtained.</p> <p>The Graduate Program in Physics has been monitoring the employment status of its graduates for 5 years after obtaining the title. As an indication of the opportunities provided we indicate the statistics about the employment of students that graduated between 2008 and 2012: 22% employed in Italian universities, 29% in foreign universities, 29% employed in private or public research bodies in Italy or abroad; additionally there are secondary school teachers, financial analysts, LtD. Ceo, programmers, analysts in statistical offices of insurance companies, etc ...</p>
<i>Main cooperating international Universities and Research Institutions</i>	<ol style="list-style-type: none"><li>1 Laboratorio CERN (Ginevra, CH); ambito: fisica nucleare e subnucleare</li><li>2 ESO Garching (Monaco, Germania), ambito: astrofisica</li><li>3 UC Davis, University of California, Davis Calif. (USA): ambito: fisica teorica</li><li>4 Paul Scherrer Institute, Villigen (CH): ambito: fisica medica</li><li>5 DIPIC, San Sebastian (Spagna); ambito: fisica della materia</li></ol>

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