



# UNIVERSITÀ DEGLI STUDI DI TRIESTE

Rettorato e Direzione Generale  
Sezione Ricerca e Dottorati  
Ripartizione Dottorati

ATTACHMENT 4

LAST REVISED 12/06/2015

## PHD IN PHYSICS OVERVIEW

IN BRIEF		
<b>Lines of research</b>	1	Nuclear and subnuclear physics
	2	Astrophysics
	3	Condensed matter physics
	4	Theoretical physics
	5	Medical physics and biophysics
<b>Administrative location</b>	University of Trieste	
<b>Organizing Department</b>	Department of Physics	
<b>Duration</b>	3 years	
<b>Maximum number of months to be spent abroad by each PhD student</b>	12	
<b>Official language</b>	English	
<b>Language (alternative to Italian) partially used in PhD activities</b>	--	
<b>Subject Area</b>	02	PHYSICS
<b>Macro Research Fields</b>	02/A	PHYSICS OF FUNDAMENTAL INTERACTIONS
	02/B	PHYSICS OF MATTER
	02/C	ASTRONOMY, ASTROPHYSICS, EARTH AND PLANETARY PHYSICS
<b>Scientific Disciplinary Sector</b>	FIS/01	EXPERIMENTAL PHYSICS
	FIS/02	THEORETICAL PHYSICS, MATHEMATICAL MODELS AND METHODS
	FIS/04	
	FIS/05	ASTRONOMY AND ASTROPHYSICS
	FIS/07	APPLIED PHYSICS (CULTURAL HERITAGE, ENVIRONMENT, BIOLOGY AND MEDICINE)
<b>Domain European Research Council</b>	PE	PHYSICAL SCIENCES AND ENGINEERING
<b>ERC Panels</b>	PE2	FUNDAMENTAL CONSTITUENTS OF MATTER: PARTICLE, NUCLEAR, PLASMA, ATOMIC, MOLECULAR, GAS, AND OPTICAL PHYSICS
	PE3	CONDENSED MATTER PHYSICS: STRUCTURE, ELECTRONIC PROPERTIES, FLUIDS, NANOSCIENCES
	PE9	UNIVERSE SCIENCES: ASTRO-PHYSICS/CHEMISTRY/BIOLOGY; SOLAR SYSTEM; STELLAR, GALACTIC AND EXTRAGALACTIC ASTRONOMY, PLANETARY SYSTEMS, COSMOLOGY, SPACE SCIENCE, INSTRUMENTATION
<b>Erasmus</b>	13.2	PHYSICS

<b>Subject Area Codes</b>	13.5	NUCLEAR AND HIGH ENERGY PHYSICS
	13.7	ASTRONOMY, ASTROPHYSICS

<b>WHO'S WHO</b>	
<b>Chair</b>	Prof. Paolo Camerini – Department of Physics – University of Trieste - phone N. 040.558.3379/3396; fax 040.558.3350; email <a href="mailto:camerini@trieste.infn.it">camerini@trieste.infn.it</a>
<b>Vice</b>	Prof. Marisa Girardi - Department of Physics – University of Trieste – phone N. 040.3199.147; fax 040.3199.123; email <a href="mailto:girardi@oats.inaf.it">girardi@oats.inaf.it</a>
<b>Web site</b>	<a href="http://df2.units.it/?q=en/node/2986">http://df2.units.it/?q=en/node/2986</a>
<b>Email</b>	<a href="mailto:dottorato.fisica@units.it">dottorato.fisica@units.it</a>
<b>Learning outcomes</b>	<p>Graduates will possess competency in basic principles of physics.  Graduates will possess an advanced and deep knowledge of their own research area of specialization.  Graduates will be highly skilled in using advanced scientific experimental/observational/computational/theoretical methods and/or tools appropriate to their area of specialization.  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.  They will be able to carry out an original scientific work at the leading edge of their field, producing a written dissertation.  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.  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>
<b>Job placement opportunities</b>	Research activities in national and foreign universities, research centers and industry. Teaching in universities and secondary schools. Jobs which require high scientific expertise, both in the public and private sector.
<b>Main cooperating international Universities and Research Institutions</b>	<ol style="list-style-type: none"> <li>1 Centre Europeen de Recherche Nucleaire (CERN, Ginevra-Svizzera)</li> <li>2 ESO GARCHING (Germania)</li> <li>3 University of Cologne (Germania)</li> <li>4 École Polytechnique Fédérale de Lausanne (Switzerland)</li> <li>5 UC Davis, University Of California (USA)</li> </ol>