UNIVERSITÀ
DEGLI STUDI DI TRIESTE

Area dei Servizi Istituzionali
Settore Servizi agli studenti e alla didattica
Ufficio Dottorati di ricerca

ATTACHMENT 4 LAST REVISED 21/05/2020

PhD IN PHYSICS (in partnership with the National Institute for Nuclear Physics) OVERVIEW

IN BRIEF		
Lines of research	1	Nuclear and subnuclear physics
	2	Astrophysics
	3	Condensed matter physics
	4	Theoretical physics
	5	Medical physics and biophysics
Administrative location	University of Trieste	
Organizing Department	Department of Physics	
Partner	National Institute for Nuclear Physics	
Duration	3 years	
Attendance abroad that entitles to a scholarship increase - min. max. of months for each PhD student (over 3 years)	0 - 18	
Official language	English Lectures, Seminars and Exams will be entirely in English	
Subject Area	02	PHYSICS
Macro Research Fields *(in alphabetical code order)*	02/A	PHYSICS OF FUNDAMENTAL INTERACTIONS
	02/B	PHYSICS OF MATTER
	02/C	ASTRONOMY, ASTROPHYSICS, EARTH AND PLANETARY PHYSICS
	02/D	APPLIED PHYSICS, DIDACTICS AND HISTORY OF PHYSICS
Scientific Disciplinary Sectors *(in alphabetical code order)*	FIS/01	EXPERIMENTAL PHYSICS
	FIS/02	THEORETICAL PHYSICS, MATHEMATICAL MODELS AND METHODS
	FIS/03	PHYSICS OF MATTER
	FIS/04	NUCLEAR AND SUBNUCLEAR PHYSICS
	FIS/05	ASTRONOMY AND ASTROPHYSICS
	FIS/07	APPLIED PHYSICS (CULTURAL HERITAGE APPLICATIONS, MEDICAL PHYSICS AND BIOPHYSICS, EVIRONMENTAL PHYSICS)
Domain European Research Council	PE	PHYSICAL SCIENCES AND ENGINEERING
ERC Panels	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

WHO'S WHO	
In partnership with the National Institute for Nuclear Physics	
Chair	Prof. Francesco Longo - Department of Physics – University of Trieste - phone +39 040.558.3381 - +39 040.375.6222; email francesco.longo@ts.infn.it
Vice	Prof. Roberto Valandro - Department of Physics – Str. Costiera – University of Trieste - tel. +39 040 2240364, email Roberto.Valandro@ts.infn.it
PhD Academic Board	List of members
Web site	http://web.units.it/dottorato/fisica/en
Email	dottorato.fisica@units.it
Course description and objectives	Graduates will possess an advanced and deep knowledge of their own research area of specialization. They 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 high quality written dissertation. Graduates will be able to summarize 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.
Job placement opportunities	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. Employment data for our PhD show a very positive trend: for several years the students have been monitored for few years after the PhD diploma. Obtaining good post-doc positions at Italian or foreign Institutions, Universities or Laboratories is considered an indirect, but effective quality indicator of the PhD School. The PhD students employment areas include Italian universities, Foreign universities, Italian or foreign research institutes, High School teachers, Financial analysts, Programmers, Statistics experts in insurance companies, etc.
Main cooperating international Universities and Research Institutions	1 Centre Europeen de Recherche Nucleaire (CERN) - Geneva, Switzerland 2 ESO GARCHING, Germany 3 École Polytechnique Fédérale de Lausanne, Switzerland 4 KEK, the High Energy Accelerator Research Organization - Japan 5 Institute for Advanced Studies – Princeton, USA