

Physics

** Integrata con Decreto Rettorale n. 753/2020 Prot. 113600 del 30/06/2020
e Decreto Rettorale n. 872/2020 Prot. 136791 del 17/07/2020

Cycle	XXXVI
Director	Prof. Eleonora Luppi - Department of Physics and Earth Sciences – eleonora.luppi@unife.it
Duration	3 years
Partner Institution	Italian Institute for Nuclear Physics (Istituto Nazionale di Fisica Nucleare – INFN) H.Niewodniczański Institute of Nuclear Physics Polish Academy of Sciences (IFJ PAN), Kraków, Poland
Curriculum	No
Research Topics	http://www.unife.it/studenti/dottorato/corsi/riforma/physics
Qualification required for admission	Italian degree known as “Laurea specialistica/magistrale” or a degree awarded prior to approval of Ministerial Decree D.M. n. 509 of 3 November 1999, updated with D.M. n. 270 of 22 October 2004, n. 270; Master’s (second level) degree, or an equivalent foreign academic qualification awarded abroad.

Available Positions

Positions with Scholarship	Regular positions	10
	Reserved positions for Candidates coming from foreign Institutions	1
Positions without Scholarship	Regular positions	2
	Reserved positions for Candidates coming from foreign Institutions	1
Positions reserved to candidates belonging to specific categories	Reserved positions for candidates holding a foreign government scholarship or a scholarship funded by international mobility programmes	2
Positions with salary keep	Reserved positions for employees of Companies active in high qualification activities (Industrial Doctorate) or Reserved positions for employees of Public Institutions or Research Centers active in high qualification activities (Ph.D. Course with salary keep)	2
Total number of available positions:		18

Kind of Financial Support

N°	Financial support	Research Topic
3	Università degli Studi di Ferrara	-
2	Italian Institute for Nuclear Physics (Istituto Nazionale di Fisica Nucleare – INFN)	-
1	Italian Institute for Nuclear Physics – Legnaro (Istituto Nazionale di Fisica Nucleare – INFN)	Nuclear Physics and Nuclear Technologies
1	Financed by Dept. of Earth Sciences and Physics - Excellency Departments Project 2018-2022	
1	Co-financed by Dept. of Physics and Earth Sciences and Università degli Studi di Ferrara	Researches on Ferrara University cultural Heritage of Physics and their relationship on education and communication of Science
1	Co-financed by Dept. of Physics and Earth Sciences and Università degli Studi di Ferrara	Study of hadron structure with polarized deep-inelastic scattering
1	Co-financed by Dept. of Physics and Earth Sciences and Università degli Studi di Ferrara	Novel detection techniques based on laser spectroscopy and possible applications to industrial sector
1**	Financed by INAF – Astronomic Observatory of Padova	Exploiting the Deepest Hubble Space Telescope Observations of Galactic Globular Clusters
1	In collaboration with l’Istituto d’Istruzione Secondaria Superiore “A. Roiti” (Reserved position for employees of Institutes and public Research Centers active in high qualification activities - with salary keep)	Development of an innovative "Hands on Physics" methodology for teaching Physics at high school level
1**	In collaboration with CERN - Dipartimento di Fisica Sperimentale dell’European Organisation for Nuclear research (Reserved position for employees of Institutes and public Research Centers active in high qualification activities - with salary keep)	Development of analysis framework and application to lepton flavour universality studies with beauty hadrons in LHCb

Assessment Criteria

Evaluation of qualification: maximum score 20 points. Minimum score required to be admitted to the interview 12/20

Interview: maximum score 60 points (including the foreign language examination). **Minimum final score required: 60/80**

During the interview, applicant's knowledge of the following languages will be tested.

English

List of documents for the evaluation

Curriculum vitae et studiorum	Mandatory documents: Complete academic career information, a list of examinations and grades and final mark, for Bachelor and Masters degrees. Thesis abstract (max length 2 pages), with the following structure: motivation, research methodology, obtained or expected results and bibliography. Only for undergraduates students the abstract must be signed by the supervisor.	Up to 14 points
Scientific publications	Mandatory documents: <i>In extenso</i> copy of the publications, including abstracts and/or papers presented in national or international congresses and meetings; OR File containing the full list of the publications with relevant link.	Up to 2 points
Reference letters	Maximum 3 letters, supporting the application, written and signed by teachers, experts, researchers or professionals, qualified on the course topics.	Up to 3 points
Other academic or professional qualifications	Certified working experiences in the field. Others academic qualifications	Up to 1 point

Interview

Verification of the knowledge on the subject of the Doctoral Research topics and Candidate's linguistic skills.

Examination timetable

Evaluation of qualifications and interview will take place in September.

Evaluations' results may be checked at the following link: <http://www.unife.it/studenti/dottorato/concorsi/selection>.

The beginning date for consulting the evaluations' results and the interview schedule will be available within the present call deadline at the following page <http://www.unife.it/studenti/dottorato/concorsi/commissioni>