

# UNIVERSITÀ degli STUDI di NAPOLI “FEDERICO II”



PhD PROGRAM IN PHYSICS

CALL FOR APPLICATIONS

in the frame of

**EU PROJECT “INSIGHTS”, H2020-MSCA-ITN-2017**

**GRANT AGREEMENT N. I63C17000240006**

Deadline for applications: April 30<sup>th</sup>, 2018 (hr 12:00, Italian time)

***This document cannot be used for legal purposes  
and it is only meant to provide information in English on the call for applications***

The Università degli Studi di Napoli Federico II has opened a call for **two PhD in Physics positions** within the EU project “INSIGHTS”, H2020-MSCA-ITN-2017 Grant Agreement n. I63C17000240006. The two Ph.D. positions will last 3 years and will carry out the following experimental research activity:

1. ***Search for physics beyond the Standard Model in events with top quarks in the CMS experiment at the Large Hadron Collider.***
2. ***Machine learning techniques applied to the analysis of nuclear emulsions for dark matter search and neutrino physics.***

The Admission to the PhD Program will be on a competitive basis

Selection of the applicants will be based on the evaluation of their CVs, degree certificates and transcripts, any other academic qualification, recommendation letters and related documents, followed – for the shortlisted applicants – by an interview.

Both positions will be enrolled in the PhD program in Physics, at the University of Naples “Federico II”. One position will be funded by the Physics Department and the other one by INFN – (Italian) National Institute for Nuclear Physics.

## **REQUIREMENTS FOR THE ADMISSION**

Ph.D. candidates are ***Early Stage Researchers*** (ESRs) according to the EU definition. Eligibility conditions for ESRs are, at the time of recruitment:

1. having a university degree allowing to enter a PhD program;

2. having a maximum of four years of full-time research experience, including any period of research training, after obtaining the degree which formally allowed them to embark on a doctorate in the country in which the degree/diploma was obtained or in the host country (irrespective of whether or not a doctorate was envisaged).

ESRs cannot be PhD holders at the start of their employment contract.

The European Commission's mobility rules state: *At the time of recruitment by the host organization, researchers **must not have resided** or carried out their main activity (work, studies, etc) **in Italy** for more than 12 months in the 3 years immediately prior to the reference date. Short stays such as holidays and/or compulsory national service are not taken into account.*

For refugees under the Geneva Convention, the refugee procedure (i.e. before refugee status is conferred) will not be counted as 'period of residence/activity in the country of the beneficiary'.

To apply to the above Research Doctorate Program candidates should have obtained one of the following degrees:

- a master degree in Physics or Engineering or Computing Science, according to the Italian Ministerial Decree nr. 509/1999 and its subsequent modifications and integrations ("laurea specialistica" or "laurea magistrale");
- an academic degree in Physics or Engineering or Computing Science, according to the Italian previous academic system ("laurea"), where the legal course lasted for at least four years;
- an equivalent degree obtained from a foreign university. Applicants who will obtain their degree by June 30<sup>th</sup> 2018 may apply too. In such a case, they will be admitted conditionally, and they have to deliver a provisional degree certificate to the Università degli Studi di Napoli Federico II at the beginning of their Ph.D. course. The equivalence of the degree of the candidates graduated abroad will be ascertained on the basis of the documents attached by the candidate to the application form.

The selection will be based on both the assessment of the qualifications and an interview: specific merit rankings will be compiled for this selection.

Applicants must attach to their applications the following documents:

- certificate of the master degree with the final marks and the academic curriculum, reporting the examinations passed, their marks, and a short description of their contents. If these documents are in a language other than Italian, English, French, Spanish or German, they must be translated into one of the above-mentioned languages and the translation must be certified and legalized as a true copy;
- any further qualification (grants/scholarships, certificates of attendance in post degree courses, research activities, scientific publications, marks scored in standard - national or international - tests to be admitted to academic courses, etc.);
- recommendation letters;
- curriculum vitae.

Applicants will take the interview by video conference (e.g. Skype, or similar), by showing a legally valid identity document.

## APPLICATIONS

Applicants are required to send their undersigned form, together with the CV, qualifications and related documents, by e-mail, to the following address: [dottorato@fisica.unina.it](mailto:dottorato@fisica.unina.it)  
*Undersigned application form, CV and all the other documents must be previously scanned and converted in .pdf files.*

The application form must send by e-mail, by and no later than 12.00 a.m. (Italian time) on April 30<sup>th</sup> 2018.

Having not filled and/or sent the application form within the deadline and according to the correct procedures will cause the exclusion of the candidate from the competitive examinations.

## EXAMINATIONS FOR ADMISSION TO RESEARCH DOCTORATE PROGRAMS

Moreover, all the candidates must prove a good knowledge of English language.

The Selection Committee will assess the candidate qualifications provided by:

- academic career: final degree grade or grade point average of the marks of the examinations;
- scientific publications and other qualifications including recommendation letters by teachers/experts or other qualifications such as prizes, patents, fellowships.

Shortlisted candidates will be admitted to an interview that will deal with the research activity carried out by the candidate and with his/her background in particle physics.

To take the examinations, candidates will produce one the following legally valid identity document: identity card, passport. The candidate will be considered as a renouncer, if she/he, for any reason, will be absent on the day, place and time scheduled for the examinations.

## **ADDITIONAL INFORMATION**

### MERIT RANKING LISTS

The selected candidate - eligible for the enrolment in the Doctorate Program – must submit her/his acceptance within 10 days from the date of the publication of the final results of the competition.

### ENROLMENT PROCEDURE

Results of the selection will be published on the PhD program in Physics website, at the link [http://www.fisica.unina.it/en\\_GB/avvisi-dottorato](http://www.fisica.unina.it/en_GB/avvisi-dottorato)

Such a publication represents an official notification of the results to the admitted candidates.

### STUDENT GRANTS

The scholarships will be conferred by following the order in the final ranking, until full coverage of the available positions.

The Ph.D. student will be admitted to the second and third year of the Ph.D. program upon the verification of his/her fulfillment of the educational and research program.

The gross scholarship amounts to euro 3,318.37/month; in addition to it, a gross mobility allowance of euro 600.00/month is provided for, as well as a gross family allowance of euro 500.00/month if applicable.

The cost of enrolment in the Ph.D. school and of the doctoral courses, as well as all expenses related to travel to schools, workshops, and network-organized events and internships will be sustained by the network.

The instalments will be credited monthly, by postponed payments.

The grants cannot be added up to other scholarships.

## **RIGHTS AND OBLIGATIONS OF DOCTORATE STUDENTS**

At the end of the Doctorate program, the PhD students must submit to the Academic Board a report concerning all the activities they attended to and their publications.

Contemporary attendance at the Research Doctorate Program and at any other university course is forbidden.

Students enrolled in a Research Doctorate Program may request suspension from attending the courses for maternity or serious illness. The Academic Board will take note of these suspensions.

Suspension longer than 30 days obliges the PhD students to recover all the time corresponding to the interruption of their academic activities; moreover, this suspension entails the cessation of the grant payment for the period involved. The entire duration of the PhD course cannot be reduced due to these suspensions: thus, the completion of the course will be deferred for a corresponding time.

## **DEGREE OF RESEARCH DOCTOR AND PhD THESIS**

The Ph.D. degree is obtained by defending the thesis at the end of the Research Doctorate Program. The Rector confers it in conformity with the university regulations.

The final dissertation can be written in English.

## **REFERENCE**

Webpage address, with information about the organization, research topics and educational activities of the PhD Program:

[http://www.fisica.unina.it/en\\_GB/presentazione-dottorato](http://www.fisica.unina.it/en_GB/presentazione-dottorato)

The results of the qualification assessment will be published within May 20<sup>th</sup> 2018. Shortlisted candidates will be informed by email by the interview date to be held within June 10<sup>th</sup> 2018.

Results will be available on the following web page  
[http://www.fisica.unina.it/en\\_GB/avvisidottorato](http://www.fisica.unina.it/en_GB/avvisidottorato)

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