**Autumn 2022 PhD Program**

**Application Form**

* *The Autumn 2022 call of the PhD programs contains three funding possibilities which have several peculiarities. You must take note of them (see sections C1 to C3).*
* *It is strongly encouraged to apply to several of these programs as long as your project fits clearly the specific requirements (see Table 1).*
* *The application form has to be sent by the applicant to* [*quantum-grenoble-phd@listes.grenoble.cnrs.fr*](mailto:quantum-grenoble-phd@listes.grenoble.cnrs.fr)***before October 7th, 2022, 5:00 pm (central European time).***
* *The recommendation form (section F) has to be sent by the referee directly to* [*quantum-grenoble-phd@listes.grenoble.cnrs.fr*](mailto:quantum-grenoble-phd@listes.grenoble.cnrs.fr)***before October 7th, 2022, 5:00 pm (central European time).***

|  |  |  |  |
| --- | --- | --- | --- |
| PhD Programs | **LANEF** | **QuanG** | **QuanTEdu** |
| Scientific areas | - Quantum materials  - Nano-physics and quantum engineering  - New frontiers in cryogenics | - Quantum materials  - Quantum technologies and devices  - Quantum computing and software  - Quantum enabling technologies  - Interdisciplinary topics in quantum sciences (applied mathematics, mathematical physics, computer science, electrical engineering, philosophy and sociology) | - Quantum matter  - Quantum engineering and hardware  - Quantum information and software  - Key enabling technologies |
| Eligibility criteria | - Synergy between two different laboratories of LANEF  - Co-funding with QuanG, same eligibility criteria as QuanG also apply | - EU MSCA mobility criteria  - Industrial or foreign academic secondments | Should in priority contribute to the following fields:  - Quantum computing  - Quantum simulation  - Quantum communication  - Quantum sensing and metrology |
| Section to fill | C1 | C2 | C3 |

*Table 1: Summary of the different PhD programs with their particularities.*

*The information collected on this form is processed for the purpose of the selection of candidates for the Automn 2022 PhD Program. The recipients of the data are the members of the selection committee. The duration of the retention of the information is limited to 5 years. It will be then destroyed.*

*In accordance with the General Data Protection Regulation (RGPD) and the amended "Informatique et Libertés" law of January 6, 1978, you have the right to object to, access and rectify information concerning you, which you may exercise by contacting* [*quantum-grenoble-phd@listes.grenoble.cnrs.fr*](mailto:quantum-grenoble-phd@listes.grenoble.cnrs.fr)

*You may also, after sending a formal protest to the UGA, file a complaint with the national control authority (CNIL) if you believe that your data has not been correctly processed.*

**A – Applicant and Thesis Information**

**Applicant:**

|  |  |
| --- | --- |
| Family Name |  |
| First Name |  |
| Gender |  |
| Nationality |  |
| Date of Birth | *dd/mm/yyyy* |
| Email Address |  |
| Phone number | *+00 (0)0 00 00 00 00 00* |
| Mobile number | *+00 (0)0 00 00 00 00 00* |
| Home Address | *Street – Postal Code - City*  *COUNTRY* |

**Thesis Title:**

|  |
| --- |
|  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Expected**  **starting date:** | *dd/mm/yyyy* | **Doctoral school:**  *(*[*List of Grenoble schools*](https://doctorat.univ-grenoble-alpes.fr/en/doctoral-studies/the-doctoral-schools/)*)* |  |

**Thesis Supervisor:**

|  |  |
| --- | --- |
| Family Name |  |
| First Name |  |
| Laboratory |  |
| Doctoral school |  |
| Email Address |  |
| Phone number | *+00 (0)0 00 00 00 00 00* |
| Mobile number | *+00 (0)0 00 00 00 00 00* |

**Thesis Co-supervisor:** *(if applicable)*

|  |  |
| --- | --- |
| Family Name |  |
| First Name |  |
| Laboratory |  |
| Email Address |  |
| Doctoral school |  |
| Phone number | *+00 (0)0 00 00 00 00 00* |
| Mobile number | *+00 (0)0 00 00 00 00 00* |

**To which programs are you applying ?**

*As long as you are eligible, you can apply to all of the following programs. Different programs have different eligibility criteria.*

[LANEF](https://www.grenoble-lanef.fr/) ☐  QuanG ☐[QuanTEdu](https://quantalps.univ-grenoble-alpes.fr/english/) ☐

**Identity proof: please insert in this page a copy of your passport**

**Summary of the Thesis Project:**

*Please type your text here. 20 lines max. Copy and paste in section F.*

**B – Scientific Program**

*This section may contain up to* ***5 pages max*** *(Arial font, 11 pt, line spacing 1.15).*

1. **Scientific project description**

* *Context and position of the project on the international scale*
* *Scientific targets*
* *Originality and innovative aspects of the project*
* *Expected outputs*
* *Description of the thesis objectives and of the proposed research programme: strategy, methods and techniques, expected timing*
* *Specify how the thesis will contribute to the expected project achievements.*

1. **Driving forces and outcomes of the project**
2. **Connection between the thesis supervisors and the applicant**

*Describe the context in which the student and their thesis supervisor(s) have met and built this project (based on previous collaborations – or on a spontaneous introduction). Highlight also any existing relations between the thesis supervisors and the referees chosen to write the Letters of Recommendation (see section F).* *Indicate whether direct interactions / phone conversations between the thesis supervisor(s) on one hand, the applicant and these referees on the other hand, have helped to prepare this project*

1. **Assets and suitability of the candidate for the project**
2. **Interdisciplinary aspects**

*Please describe to what extent the project has an interdisciplinary character, and specify which disciplines are involved.*

1. **Ethics**

*Does your project raise any ethical issue? Please detail.*

**C – Program specific information**

**C1- LANEF**

If you want to apply to the [LANEF](http://www.grenoble-lanef.fr/spip.php?article53) Doctoral program, please provide the following information.

**N.B.** The LANEF Doctoral program will be cofunded by the QuanG Doctoral program. To apply to it, please apply also to QuanG

1. **LANEF Laboratory:**

Indicate which labs are related to your project with a cross (x) and identify the main hosting lab with a doubled cross (xx) (remember to put at least two labs).

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NEEL |  | IRIG |  | G2ELab |  | LIPhy |  | LNCMI |  | LPMMC |  |

1. **Relevant Challenge(s):**

Indicate which challenges are related to your project with a cross (x) and highlight the main one with a doubled cross (xx).

|  |  |
| --- | --- |
| Quantum Materials |  |
| Nanophysics and Quantum Engineering |  |
| New frontiers in cryogenics |  |

1. **Contribution to LANEF’s synergies**

In order to enhance the synergies between the six LANEF labs, your thesis needs to be co-supervised by two researchers belonging to two different LANEF laboratories. Please specify here.

**d) Additional remarks**

Please provide here any further information related to the application

**BEFORE APPLYING!!**

Make sure to contact the [steering committee member](http://grenoble-lanef.fr/spip.php?article13) of your (main) relevant research domain. He/she will check that your application form contains the information required for the jury to evaluate your profile and PhD project

**C2 – QuanG**

If you want to apply to the [QuanG Doctoral programme](../../../../../tmp/mozilla_minguzzi0/Autumn2022-phd-program-application-form_OB_VS.docx%3F%3F%3F%3F%3F), supported by Marie Sklodowska Curie Actions from the European Union, please provide the following information.

1. **Marie Sklodowska Curie Action (MSCA) mobility rule**

In order to be eligible to this program you must satisfy to the MSCA mobility criteria. That is, you must not have spent more than one year in France during the last three years (between October 7th 2019 and October 7th, 2022) not including holidays. Indicate in the table below your activity during the last 3 years:

|  |  |  |
| --- | --- | --- |
| Dates | Activity | Country |
|  |  |  |
|  |  |  |
|  |  |  |

1. **Relevant axes:**

Indicate which axes are related to your project with a cross (x) and highlight the main one with a doubled cross (xx).

|  |  |
| --- | --- |
| Quantum materials |  |
| Quantum technologies and devices |  |
| Quantum computing and software |  |
| Quantum enabling technologies |  |
| Interdisciplinary topics in quantum sciences |  |

1. **Secondment** (1 page max)

A secondment during the 36 months of the thesis is compulsory within the QuanG program. You may choose between an industrial secondment (preferred option, minimum 2 months) and a research stay in a foreign laboratory (alternative option, minimum 4 months). The QuanG program will cover the travel and living expenses (2 months for industrial secondment, 4 months for research visits) associated to the secondment up to a maximum of 8k€.

**c1) Industrial secondment**

Indicate in which company or Research and Development centres you will carry out your industrial secondment. On what topic? For how long? See the [QuanG call web page](https://quantalps.univ-grenoble-alpes.fr/education/phds/autumn-2022-phd-program-1102611.kjsp) for a (not exhaustive) list of industrial partners already engaged with QuanG. What is your motivation for doing this industrial secondment?

**c2) Research visit in foreign laboratories**

Indicate in which foreign academic laboratory you will carry out your secondment. On what topic? For how long? See the [QuanG call web page](https://quantalps.univ-grenoble-alpes.fr/education/phds/autumn-2022-phd-program-1102611.kjsp) for a (not exhaustive) list of academic partners already engaged with QuanG. Acceptance of this secondment is subjected to approval of the recruitment committee. An acceptance letter of the hosting group leader must be added to the application as well as a well-argued motivation letter of the candidate.

**BEFORE APPLYING!!**

Make sure to contact the QuanG staff at [quantum-grenoble-phd@listes.grenoble.cnrs.fr](mailto:quantum-grenoble-phd@listes.grenoble.cnrs.fr) He/she will help you and check that your application form contains the information required for the jury to evaluate your profile and PhD project.

**C3- QuanTEdu**

If you want to apply to the QuanTEdu Doctoral program, please provide the following information.

1. **QuantAlps Laboratory:**

Indicate which [lab(s) of the QuantAlps federation](https://quantalps.univ-grenoble-alpes.fr/about-us/labs/) are related to your project

|  |
| --- |
|  |

1. **Relevant topics:**

Indicate which research topics are related to your project with a cross (x) and highlight the main one with a doubled cross (xx).

|  |  |
| --- | --- |
| Quantum engineering and hardware |  |
| Key enabling technologies |  |
| Quantum matter |  |
| Quantum information and software |  |

1. **Contribution to QuantAlps synergies**

Indicate whether the project will contribute to one or several of the federative projects of QuantAlps (put a cross (x))*:*

|  |  |
| --- | --- |
| Quantum computing |  |
| Quantum simulation |  |
| Quantum communication |  |
| Quantum sensing and metrology |  |

Describe here the synergetic character of the application: how the project will contribute to one or more of the federative projects of the QuantAlps federation indicated above.

|  |
| --- |
|  |

1. **Additional remarks:**

***(1) PhD cofunding*** *with other programs or institutions is possible; in this case you must describe it in the application form, and include an official document of acceptance by this program/institution with indication of 18 Months of salary (if duly justified, the official document may be sent later but it must be received before November 6th ).*

***(2)*** *In case of two supervisors belonging to two different doctoral schools, the rules of the two doctoral schools will be applied.*

**D – Curriculum Vitae of the applying student**

*Make sure the CV contains the following information:*

* *Gender, Date/Place of Birth, Nationality*
* *University education, copy of the master degree diploma (if obtained already) or information about the master degree (to be obtained soon)*
* *Previously occupied job positions*
* *Applicant’s current situation*
* *Applicant’s research activities*
* *Applicant’s list of publications, posters, patents, etc...*
* *English proficiency test results if relevant*
* *... and any other information helping to establish the applicant’s excellence level*

*The student’s application form must also contain:*

* ***One cover letter*** *indicating why the applicant wants to prepare a PhD, what he/she expects from these three years, and what are his/her plans for his/her future career.*
* ***At least two recommendation letters for the applicant in a pdf format.***

*They must be written in accordance with the letter template (available* ***in section F****) and be sent* ***directly by their author*** *to quantum-grenoble-phd@listes.grenoble.cnrs.fr*

*One of these letters must be written by the professor in charge of the student’s master degree.*

***This CV must be completed with a complete statement   
of the student’s exam results - delivered by his/her University.***

***University’s ranking information (if available) must also be provided.***

**E - Commitment and Agreements**

**Host Laboratory Agreement:**

|  |  |  |
| --- | --- | --- |
| **Hosting Laboratory** | *Lab Name* | |
|  |  |  |
| Thesis supervisor: | *Name:* | *Signature* |
|  |  |  |
| Laboratory Director: | *Name:* | *Signature* |
|  |  |  |

**Thesis Applicant Agreement:**

**Applicant’s signature:**

**Date:**

**For QuanG/LANEF applications only: MSCA rules**

I undersigned [First Name LAST NAME] declare that I comply the following MCSA eligibility rules:

*– Applicants should not be a current employee of the host laboratories*

*– Applicants must not be living in France for more than 12 months during the past 3 years at the time of application  
– Applicants must be doctoral candidates, i.e. not already in possession of a doctoral degree at the deadline of the co-funded programme's call*

**Applicant’s signature:**

**Date:**

**F –** **Letter of Recommendation (2 pages) – to be sent separately to (at least) 2 referees**

The green sections are to be filled by the applying student

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **This letter of recommendation is for a PhD application at xx Laboratory in France on the subject of: xxxx** | | | | | | | | | |
| **A. General** | | | | | | | | | |
| *Applicant’s full Name :* | | |  | | | | | | |
| *Applicant’s email:* | | |  | | | | | | |
| *Referee’s full Name:* | | |  | | | | | | |
|  | | | | | | | | | |
| **B. Relation of referee to applicant** | | | | | | | | | |
| *1) I have known the applicant in the following capacities* | | | | | | | | | |
| *Please use x* |  | | | | Courses | | | Comments | |
|  | as an (under)graduate student or equivalent | | | |  | | |  | |
|  | as a master student | | | |  | | |  | |
|  | as a teaching/research assistant | | | |  | | |  | |
|  | as a professional colleague | | | |  | | |  | |
|  | by reputation | | | |  | | |  | |
|  | Other: | | | |  | | |  | |
| *2) I was acquainted with the applicant and his/her work from dd/mm/yyyy to dd/mm/yyyy* | | | | | | | | | |
| *3) I had a* \_\_ poor \_\_ fair \_\_ good \_\_ excellent *opportunity to observe the quality of the applicant’s work* | | | | | | | | | |
| *4) If the applicant is/was a student how does he/she compare with students currently in your department/class* | | | | | | | | | |
| *5) Please indicate (with a x) on this scale, your overall impression of the applicant* | | | | | | | | | |
| Below average | | Average | | Above average | | Excellent | Outstanding | | Insufficient opportunity to judge |
|  | |  | |  | |  |  | |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **C. Recommendation Letter** | | | | | | |
|  | **For applicants in Physics/Computer Sciences/Mathematics** | | | | | | |
| *Please assess the applicant’s* | | unable to judge | poor | fair | good | excellent  *top 10%* | Outstanding  *top >1%* |
| Overall knowledge of physics and/or nanotechnologies | |  |  |  |  |  |  |
| Skill in experimental design | |  |  |  |  |  |  |
| Technical abilities | |  |  |  |  |  |  |
| Innovative abilities/creativity | |  |  |  |  |  |  |
| Ability to work independently | |  |  |  |  |  |  |
| Analytical abilities | |  |  |  |  |  |  |
| Skills in reporting and interpreting data | |  |  |  |  |  |  |
| Language (learning) skills | |  |  |  |  |  |  |

|  |
| --- |
| ***Please comment, if possible, on the overall applicant’s scientific and technical abilities, both in comparison with other students/scientists/engineers with similar training and experience and provide your overall recommendation for the applicant to carry out a PhD (autonomy, motivation, curiosity…). A short description of the PhD is given below.***  **Please add your full contact details, describing precisely your institution / laboratory:**  **Please send this recommendation letter in pdf format directly by email** [**to**](mailto:toquantum-grenoble-phd@listes.grenoble.cnrs.fr) [***quantum-grenoble-phd@listes.grenoble.cnrs.fr***](mailto:quantum-grenoble-phd@listes.grenoble.cnrs.fr) ***An acknowledgement of receipt will be sent to you and to the applying student.*** |

**Summary of the Thesis Project:**

*Please type here the* [*summary of the section A*](#Summary) *of your application form, before sending it to the referee.*