



# 2017 PhD. Program

## Quantum engineering

### In Grenoble

**Quantum engineering** is a novel domain of research, built on fundamental research carried out in the last 20 years all over the world. Quantum technologies offer radically new materials and devices for the next century, in sectors such as security, energy, communications, or healthcare. To transform such disruptive scientific concepts into real life benefits it is crucial to develop research aiming at higher technology readiness levels. To ensure that Europe takes the leadership in this coming quantum revolution, we must train next generation quantum engineers, by offering doctoral training in interconnected domains with the highest scientific standards, while equally providing an opening to the industrial world.

**Grenoble** is world renowned for its fundamental research institutes in condensed matter physics, nanosciences, computer sciences & mathematics as well as its high-tech innovative companies ranging from local start-ups to multinational groups. Grenoble area hosts 25 000 academic and industrial researchers, and more than 60 000 students. Grenoble's ecosystem is ranked within the top 5 innovative cities in nanotechnologies worldwide and 1st in Europe.

**Grenoble Quantum Engineering (GreQuE) novel Doctoral Programme** will grant 25 PhD projects hosted in Grenoble research institutes in which each student will benefit from a 2 to 6 months placement in a European company. 17 SMEs & large groups in 5 countries have committed to offer such placement to our students in accordance with their PhD project.

The topics include experimental and theoretical aspects of:

- **Nanoelectronics,**
- **Superconductive Qubits,**
- **Spintronics,**
- **Photonics,**
- **Computer science.**

#### **How to apply**

GreQuE Doctoral Program is co-funded by the European Community under the Marie Skłodowska-Curie Actions (MSCA). Applicants must fulfill the MSCA mobility criteria: They must not have spent more than one year in France during the last three years.

Candidates are invited to visit the GreQuE webpage dedicated to the PhD Programme: <https://quantum.univ-grenoble-alpes.fr/join-us/phd-programmes/> and to contact us at: [greque@neel.cnrs.fr](mailto:greque@neel.cnrs.fr)

**Deadline to submit your application:**  
**5 October 2017- 11:59am (UTC+2)**