

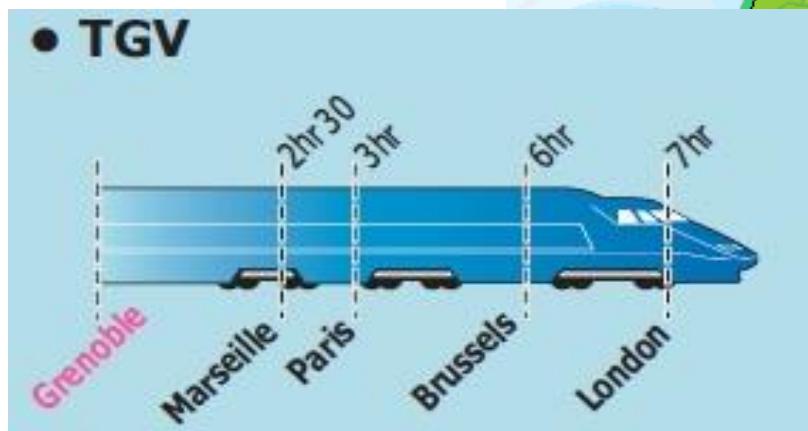
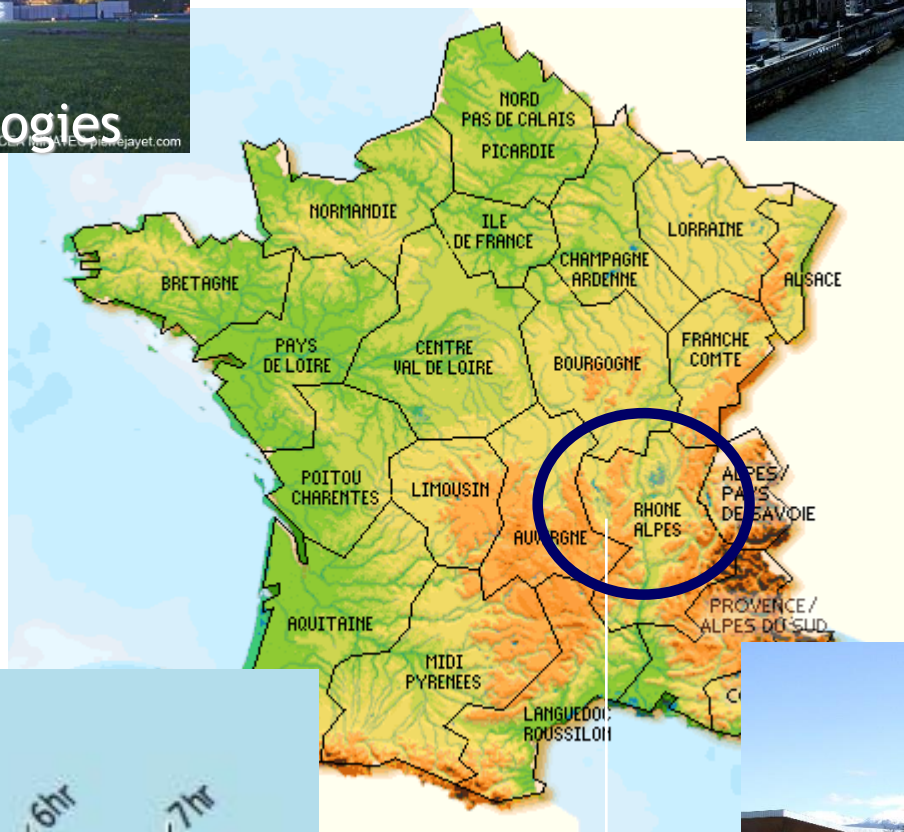


EMNano+ Master Program @ University Grenoble-Alpes

General Informations about Grenoble and UGA



Micro-Nano-Technologies



Grenoble





Grenoble

400 000 people

1 of 5 is a student

25 000 R&D jobs

France's highest concentration

200 research Labs

European
Research Facilities

Grenoble

400 000 people

1 out 5 is a student

25 000 R&D jobs

France's highest concentration

museums, theaters

Jazz festival (Vienne)

10 ski resorts < 40km

Major area for research, advanced technologies and higher education...

60 000 students
9000 international students

7500 staff members

23 international
Master's programs

1st University in France
in 11 fields including
Nanoscience-Nanotechnology



<https://www.univ-grenoble-alpes.fr/university/>



Since January 2020: UGA is the aggregation of the former Université-Grenoble Alpes and the most prestigious higher education in Grenoble : Grenoble INP Institute of Engineering and Management, Sciences Po Grenoble, School of Political Studies and ENSAG School of Architecture.

Academic Research laboratories in Nanoscience-Nanotechnology

- More than 33 academic laboratories affiliated with CNRS, UGA or CEA working in **Nanoscience** See map on the next slide and the third pdf file dedicated to the study program **with web links**.
See also <https://master-nanosciences.univ-grenoble-alpes.fr/nano-grenoble/>

- 4 European facilities: ESRF, ILL, EMBL, EMFL:



EMBL



- Micro-nanoelectronics centers and platforms: CEA Leti, CIME Nanotech, ST ...



TECHNOLOGY
RESEARCH
INSTITUTE



- 3 Laboratories of excellence (federative actions for research including PhD programs)

- **Labex Gral:** Grenoble alliance for integrated structural and cell biology (Molecular machines dynamic, self organization of Living Systems: <https://www.labex-gral.fr/ongoing-call/>)



- **Labex Lanef:** Photonics, spintronics, nanoelectronics, energy, cryogeny, nanosensors, nanomaterials... <http://www.grenoble-lanef.fr/>

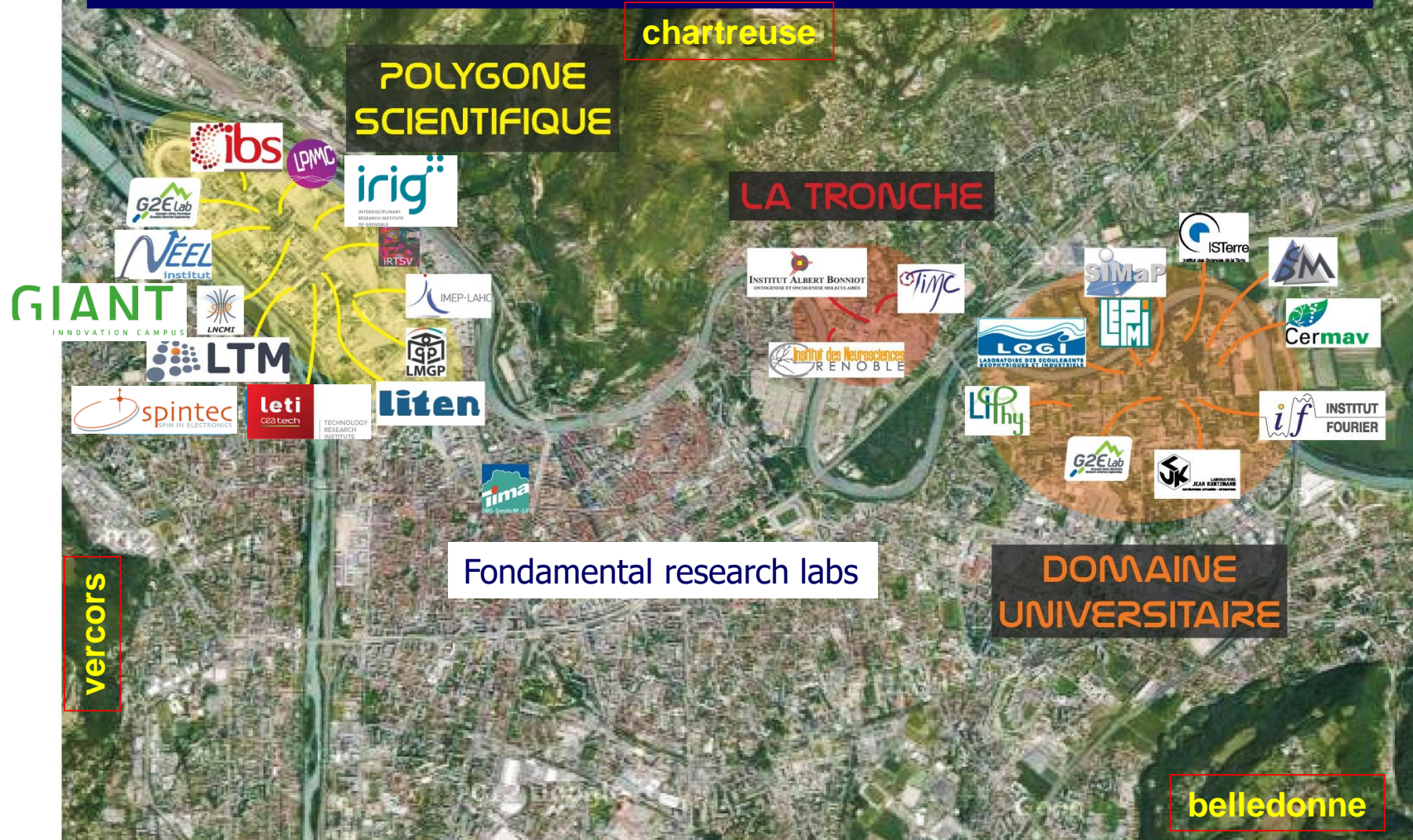


- **Labex Arcane:** Biology/chemistry interface, bio-inspired chemistry, <https://www.labex-arcane.fr/en>



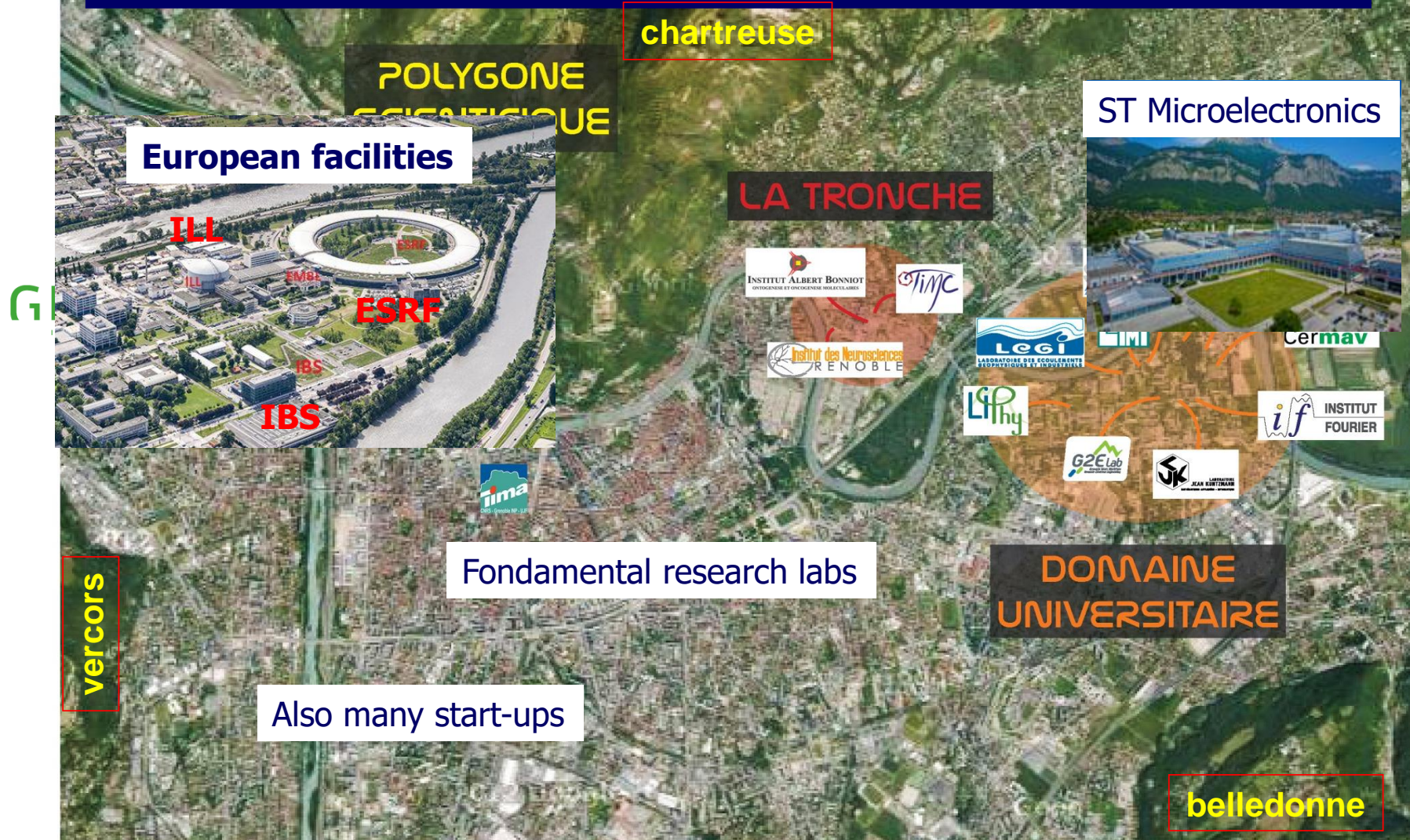
- 3 European pre-doctoral schools: [Esonn](#), Hercules, Erca (dead line May 2021 for ESONN !)

The Nanosciences Foundation's network in Grenoble = 33 laboratories



See third pdf file dedicated to the study program **with online web links on labs**

The Nanosciences Foundation's network in Grenoble = 33 laboratories



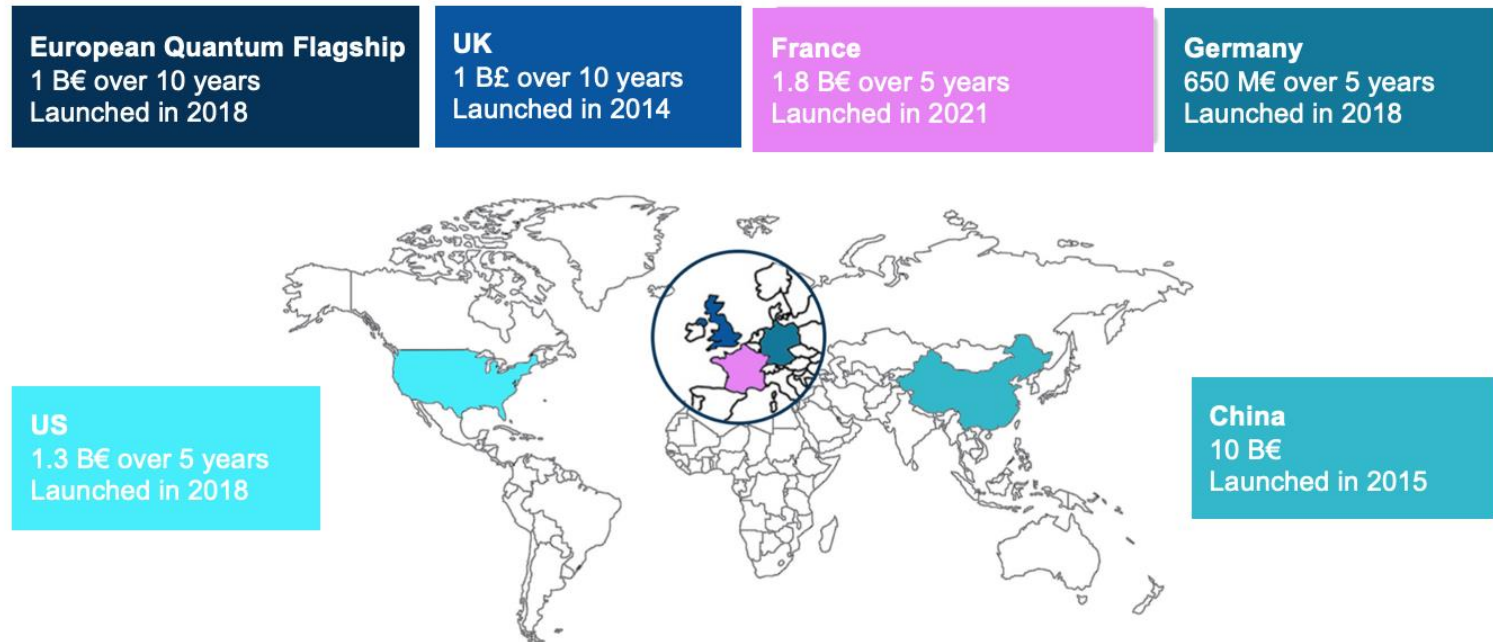
See third pdf file dedicated to the study program **with online web links on labs**



January 21th 2021 : the French President announced the launch of the **national quantum strategy**, which includes:

- New resources for researchers, **including training**, but also for start-ups and manufacturers;
- The development of quantum computing and technologies;
- Investments in all technologies around quantum: communications, sensors, cryptography.

A huge investment : 1.8 B€ over 5 years.





Research

Perimeter :

Physics, Informatic,
Mathematics, Philosophy,
Sociology

Possible research networks :

Quantum Engineering, Quantum
information and Software, Humanities
and Social Sciences for Quantum,
Quantum Materials, Energy and
Enabling Technologies.

Companies

Formation

See: Quantum engineering in Grenoble, <https://quantum.univ-grenoble-alpes.fr/>