



RESEARCH AGREEMENTS

QUANTUM BITS IGNITE THE ENGINE OF INNOVATION

The University of Trento, Fondazione Bruno Kessler and the National Institute for Nuclear Physics (INFN) have signed an agreement to share the Q@TN project in order to establish in Trento a reference centre for quantum research and technologies in Italy and in Europe and to build an ecosystem of quantum technologies that will drive innovation. The laboratory will cover the entire innovation chain, from university training to the development of new devices and the prototyping of systems ready for industrialisation. The agreement marks the transition to a new phase for the lab, which was set up at the University of Trento in 2017 by a collaboration between the University of Trento, Fondazione Bruno Kessler and the National Research Council (CNR) with the support of the Autonomous Province of Trento and Fondazione Caritro.

In its first years of activity Q@TN accounts for 4.5 million of funding obtained for research projects, the filing of five patents, over 55 scientific publications and 24 students in the cross-disciplinary PhD programme in Quantum Sciences and Technologies. As a first action of the new phase, the lab is promoting a call for access to computing resources on quantum computers made available by Cineca to support collaborative research and development projects between the various Q@TN units.

One of the next steps will be to open up the Q@TN technology infrastructure, Fbk's Quantum Technology Hub, to Italian research so that it can experiment with new concepts and ideas on advanced technological platforms with the aim of creating new quantum devices. This infrastructure will also be used by INFN researchers to contribute to the development of ultra-high-precision detectors for fundamental physics experiments. ■