CALL FOR PROPOSALS ON THE Q@TN TECHNOLOGICAL PLATFORMS

The Quantum Science and Technology in Trento (Q@TN) joint lab calls for proposals on its technological platforms. One of the pillars of Q@TN is the promotion of experimental research projects of high scientific quality in the field of quantum science and technologies (QST). Within this call we intend to promote research which leverages on the experimental or technological facilities in Trento. Three different instruments will be used:

1. ***Research projects***: these are one-year long projects, which aim at producing a deliverable about the technological or experimental advances at the end of the year. They will be supported by a research grant up to 15k€ to cover design, processing, consumables or other expenses related to the project, but no personnel cost.
2. ***Workshops***: these are meetings among different scientists aimed at discussing a given topic related to the present call and at generating a corresponding network. They will be supported by a grant up to 5K€ to cover organizational and travel expenses. As a workshop outcome, a white paper on the workshop topic has to be produced.
3. ***Scientific visits***: these are few days long visit (up to one month) by a scientist to a laboratory to get acquainted with a technique or a method. The focus is on generating novel collaborations and no joint publication between the visitor and the host in the previous five years should exist. Visits will be supported by a grant up to 3K€ to cover travelling and living expenses. At the end of the visit, a report has to be produced.

In order to promote the involvement of the whole national community in Q@TN, applications must be presented by a team including at least one member of Q@TN based in Trentino (i.e. belonging to UNITN, FBK, the local units of CNR or INFN-TIFPA), and at least one member who is an INFN or CNR associate not based in Trentino. Other scientists from other institutions can participate as well. Information about the research lines active within Q@TN, the available technological platforms and the related contacts are available on the Q@TN website (quantumtrento.eu). Proposals should include a clear statement of the needed resources, the objectives, the measures to evaluate the success and the deliverable. The ***deadline for submission is December 15th, 2021 at 12 am***. Proposals should be submitted by using the attached template in a pdf file to the email address info.qtn@unitn.it.

A selection committee will be nominated by the Q@TN liaison board (CPR) among the members of Q@TN. Projects will be evaluated by at least two external reviewers nominated by the selection committee. The committee can also seek advice from external experts to assess the technical feasibility of the activities. Based on the reviewer reports, the selection committee will rank the proposals according to the criteria listed below. Those top proposals that are within the budget limit of 50K€ will be granted. The selection process will be completed by mid January 2022 so that teams can start their activity by the end of January 2022. *The grant should be used within 2022*. The reference person of the granted projects will have to present by January 30th, 2023 a written report about the results of the project. If a preprint or a publication directly related to the results obtained from the activity are available, they can be presented instead of the report.

The main evaluation criteria common to the three instruments will be:

- *General research track of the proponents and potential to perform the proposed activity.* While a proven expertise in QST is welcome, one of the purposes of Q@TN is also to support individuals who plan to open new research lines in the direction of quantum science and technology. In that case, the scientific credibility of the applicant's intention to move into the new field will be a criterion of evaluation.
- *Potential of the project towards the establishment of successful and sustainable new research activities and collaboration between researchers of Trentino and of the national Q@TN community*. Therefore, the actual strength of the synergy will be a criterion for evaluation.

Evaluation criteria specific to each instrument are:

Research project

- *Excellence of the project in terms of scientific merit and/or perspective according to international standards*. Q@TN seeks to fund projects that go beyond the state of the art and have the potential of opening new perspectives in research, so to enable further collaborative projects. The feasibility of the proposed research, given the limited available resources, will be also considered.

Workshop proposal

- *Topic of the workshop in terms of interest, participation and potential to open effective collaborations*

Visit proposal

- *Scope of the visit and its potential impact on the future activity of the visiting person*