



QSE Postdoctoral Fellowships

"Quantum science and engineering"

2024 - Call for Proposals

Timeline

Call opening: 02.12.2024 Submission deadline: 18.03.2025 (17:00 CET) Decision: Early July 2025 Earliest project start: August 2025

1. Introduction

The <u>EPFL Center for Quantum Science and Engineering</u> (QSE) is opening its second call for **QSE Postdoctoral Fellowships.**

This Fellowship offers outstanding and motivated young researchers from Switzerland and abroad the opportunity to carry out their research in collaboration with the thriving EPFL QSE community on **cutting-edge topics in quantum science and quantum engineering**. Fellows will have autonomy to develop their own research agendas and form new research collaborations with EPFL laboratories.

For its first call, launched in 2023, <u>4 fellowships</u> were granted.

The second call is open to post-doctoral researchers who wish to work at EPFL in any area linked to quantum science and engineering. However, the QSE Center highly encourages and prioritizes applicants who plan to carry out their quantum research at one of the laboratories of the <u>IC School</u>. The 2024 call will award a maximum of 3 Postdoctoral Fellowships of 2 years each.

2. Eligibility of the applicant

The QSE Postdoctoral Fellowships are open to researchers:

- Of any nationality (see <u>these guidelines</u> for people whose nationality requires a visa to enter Switzerland);
- Who have successfully defended their thesis (i.e., defense was unconditional) at the submission deadline, in a field relevant to the broad area of quantum science and engineering (e.g., physics, engineering, computer science);
- Who wish to work at EPFL in any area linked to quantum science and engineering;
- Who have not been employed at an EPFL lab for more than 12 months at the submission deadline;
- Who have at the submission deadline a maximum net academic age of 3 years after the award date of PhD; to calculate your net academic age (e.g., breaks, illness) please follow <u>these SNSF guidelines</u>;
- Who have obtained an EPFL host support letter, signed by the head of the EPFL laboratory or unit (note: the applicant is responsible for finding, contacting and discussing with the head of the host lab, but the QSE Center can provide assistance if needed);
- Who can start their fellowship within 12 months after receiving a positive decision;
- Who are motivated to establish new research collaborations within EPFL;
- Who are committed to the main responsibility for the proposed research project;
- Who have not previously been awarded a QSE postdoctoral fellowship.

Note on resubmission: candidates who submitted an unsuccessful application to the 2023 QSE postdoctoral fellowship call are eligible to apply, taking into account the new 2024 eligibility rules and guidelines.

3. Funding and Duration

- The QSE Postdoctoral Fellowship awarded by the QSE Center will cover the **full salary of the fellow** (incl. 21% for social security charges and salary increase) over a maximum of 2 years. The basic salary is in line with the <u>EPFL post-doctoral researchers</u>. EPFL's HR can provide more detailed information on the EPFL employment conditions, taking into account seniority and family status;
- The fellow must be employed at a minimum of 80% FTE;
- No overhead shall be granted for the funded fellowships;
- The duration of the fellowships is between **12 and 24 months** and the project duration must be detailed in the application;
- The applicant must inform before and during the fellowship about any submitted or accepting thirdparty funding (if applicable).

4. EPFL host lab/unit responsibilities

The head of the EPFL host laboratory/unit:

- can support only one application for this call;
- commits to cover all direct project and indirect costs (excluding salary costs of the fellow see above) needed to carry out the fellowship project in case of awarding. This commitment must be expressed in the EPFL host support letter;
- will guarantee scientific independence of the fellow to develop their own research agenda and collaborations;
- will supervise the research, and provide the necessary advice and mentoring;
- will support the fellow in the management of the project and provide administrative assistance;
- can support an application even if they already host an QSE postdoctoral fellow (1st call) in their lab;
- cannot support an application for this call is they are part of the QSE review committee.

5. Evaluation Criteria and Review process

The application will be assessed by using the following evaluation criteria:

- **1. Excellence of the researcher:** candidate's scientific track-record and ability to conduct the planned research;
- 2. Excellence of the research project:
 - **2.1** Scientific relevance and originality;
 - 2.2 Suitability of methods, feasibility, implementation;
 - **2.3** Collaboration with EPFL host lab/unit;

2.4 Potential for collaboration with research groups in quantum science and engineering fields at EPFL;

- 2.5 Impact.
- The application will be reviewed by at least two external experts without conflict of interest (following <u>these Col guidelines</u>) who will for each of the applications award scores between 1 and 5 (1 is the lowest score, 5 is the highest) for the above-described evaluation criteria.
- The QSE review committee will assess and rank the proposals on the basis of the individual expert's evaluations and make the final decision. Careful attention will be paid to any potential conflict of interest. The committee might decide to ask specific questions to the candidates.
- The outcome and funding decision will be communicated by email to the candidates in July 2025.

6. Submission and documents

• Application documents:

1. **CV and Track-Record** including a short description of your most important academic achievements to date, ongoing grants, and submitted grant applications (*max. 4 pages; template available*);

- 2. **Research proposal**, including Summary; Current status of research in the field; Current status of personal research and required competences for the project; Detailed research plan; Research collaborations; Impact (*max. 6 pages, excluding Resources and Bibliography; template available*);
- 3. EPFL host support letter signed by the head of the lab/unit (*template available*);
- 4. **Proof of successful PhD defense** (e.g., PhD certificate or any other formal document clearly indicating the date of the successful defense of PhD);
- Names and affiliations of 3 potential reviewers, i.e. scientific experts from outside EPFL and without conflict of interest who could potentially review the proposal (please refer to the <u>Col as</u> <u>defined by SNSF</u>);
- 6. One academic recommendation letter;
- 7. Names of reviewers to be excluded (if applicable);
- 8. Any documentation needed to support the calculation of the net academic age (if applicable; please refer to <u>calculation of net academic age as defined by SNSF</u>).
- The application templates, to be requested via email, must be used for the application;
- Applications must be submitted via our online platform by the time of the submission deadline (i.e., 18.03.2025); the link to the submission platform can be found in our application toolkit, provided upon request via email;
- A budget calculator is available in the toolkit to complete the tables in the resources section of the research proposal;
- The application's content must meet all above eligibility requirements and the requirements for
 research integrity and good scientific practice (see "The Directive concerning research integrity and
 good scientific practice at EPFL (<u>LEX 3.3.2</u>)). If it becomes clear before, during or after the review
 evaluation phase, that one or more of the eligibility criteria has not been met, the application will be
 declared ineligible and rejected by the review committee.

7. Start of the funding period and grant management

- Funded projects should start within 12 months of receiving the acceptance letter;
- An Ethics Form and self-assessment is to be filled out by the candidate at the approval. Any supporting documentation, such as authorizations, is to be provided as soon as possible after the decision outcome, as this will allow a more effective ethics clearance during the granting process. You can find more information to write an ethics self-assessment in the Ethics form and on this website: https://www.epfl.ch/research/ethic-statement/compliance/;
- A data management plan, describing the FAIR principle, will have to be created at the start of the project: <u>https://www.epfl.ch/campus/library/services-researchers/data-planning-guidelines;</u>
- Any strategy for the management of intellectual property and protection measures, such as patents, design rights, copyright, etc., has to be done in collaboration with the EPFL TT office;
- The 1st-year salary of the fellow will be transferred to the lab fund communicated by the EPFL host lab/unit at the beginning of the fellowship. The 2nd-year salary will be transferred (if applicable) after the approval of an intermediate activity report. A final scientific report must be provided at the end of the project. A brief overview of the own contribution of the EPFL host lab/unit necessary to carry out the objectives of the fellowship will be quantified and described in a final financial report;
- Grantees who would leave the EPFL before the end of the project, need to inform the QSE Center to agree upon the changes in implementation of the remaining project deliverables and budget.

8. Contact

For any questions related to the call, please contact via email: qse@epfl.ch

- Philippe Caroff, QSE Center, Executive Director
- Charlotte Vandenberghe, QSE Center, Call coordinator