

Become part of the Thing Qrisp community

Professionals from business and science are already working on the programming of quantum computers and sharing the know-how of research and industry in the community. You are cordially invited to become part of the Thinq Qrisp community.

Fraunhofer FOKUS and partners are developing Qrisp as an Eclipse project, which was initially funded by the German Federal Ministry of Economics and Climate Protection (BMWK).

Further information can be found on the Qrisp website at:



https://qrisp.eu

Contact

Prof. Dr.-Ing. Nikolay Tcholtchev
Group Leader Quality Engineering for Urban
ICT and Quantum Computing
Business Unit SQC
Phone +49 30 3463-7175
nikolay.tcholtchev@fokus.fraunhofer.de

Sebastian Bock
Research Assistant (Senior)
Business Unit SQC
sebastian.bock@fokus.fraunhofer.de

Raphael Seidel
Research Assistant (Senior)
Business Unit SQC
raphael.seidel@fokus.fraunhofer.de

Fraunhofer FOKUS Kaiserin-Augusta-Allee 31 10589 Berlin

www.fokus.fraunhofer.de/en





New ideas for the programming of quantum computers



Thing Qrisp Community

Quantum computers are associated with the hope of achieving enormous leaps in computing power. However, only a few people have been able to use them to date, as their programming poses entirely new challenges. In addition, the limited number of developers means that there is hardly any exchange between them.

This will change with the Thing Qrisp Community:

An ecosystem is being created in which developers can work on new ideas for programming quantum computers. Newly developed technologies will be quickly integrated into the open-source project Qrisp.

The Thinq Qrisp Community is the central meeting place for all those who want to play a leading role in developing quantum technology. The goal is to bundle and network the activities of the quantum software engineering community.

What is Qrisp?

Qrisp is a new programming language designed to enable the commercial application of quantum computers for a broad audience of developers. Its structured programming model enables scalable development and maintenance of quantum software. Qrisp automates many small-scale programming tasks, such as the automatic release of auxiliary gubits.

As an open-source project, Qrisp enables all users to learn, share, and develop the software together, creating a dedicated and growing community.



What the Thinq Qrisp Community offers

1. Community Website

Access to a wide range of resources via our platform:

Priority access to tutorials, advice on developing quantum algorithms, and webinars

2. Learning materials and development

Basic training:

- Opportunity to try out code online and use verified teaching material
- Interactive tutorials with code examples, e.g., the Traveling Salesman Problem, to learn the basics of quantum programming

Webinars:

- Direct contact and Q&A sessions with Qrisp developers
- In-depth insights into specific topics, including systematic software development, testing, etc.

Use cases:

- Provision of information and resources on current use cases,
 e. g., to improve financial analyses, integer factorization,
 train scheduling
- Development of collaborative use cases within the community

3. Events and Activities

Networking events:

- Open development meetings and networking events
- Regular conferences and work meetings

Hackathon:

- Practice-oriented problems with the opportunity to solve real challenges
- Competitions with prizes for outstanding solutions