



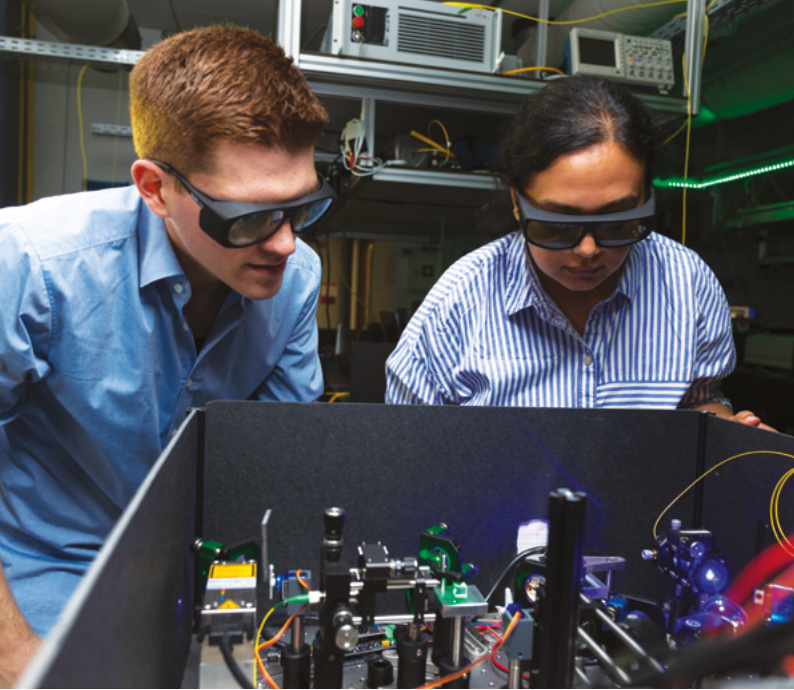
SQuaD

Schirmprojekt Quantenkommunikation Deutschland



Shaping the Future of Quantum Communication:

**Innovations for Quantum Communication
in Germany**



SQuaD – the Umbrella Project for Quantum Communication in Germany

Quantum Communication: Security for a Networked World

Quantum Communication is a key technology for ensuring the security of digital infrastructures in our society. By exploiting quantum effects, it promises tap-proof data transmission within communication and information networks.

One of today's most widely researched applications is that of quantum key distribution. In addition to post-quantum cryptography, this technology can significantly enhance both IT security and Germany's technological sovereignty in a hyperconnected world.

Background to SQuaD:

SQuaD is part of the Innovation Hub for Quantum Communication funded by the German Federal Ministry of Education and Research (BMBF) and is being coordinated by the Physikalisch-Technische Bundesanstalt (PTB) in cooperation with Germany's Federal Office for Information Security (BSI).

Other partners in the SQuaD network are:

- KEEQuant GmbH, Fürth
- Quantum Business Network UG, Munich
- Saarland University, Saarbrücken
- Fraunhofer Institute for Systems and Innovation Research ISI, Karlsruhe
- Fraunhofer Institute for Applied Optics and Precision Engineering IOF, Jena
- Fraunhofer Heinrich Hertz Institute HHI, Berlin
- Leibniz University, Hanover



Structure of SQuaD: involved partners and interaction with relevant actors and alliances of the QCom ecosystem.

The Tasks of SQuaD include:

- Support technology transfer from science to industry in Quantum Communication
- Link fundamental research and industry in one central point of contact
- Create a networking platform for Quantum Communication in Germany
- Provide test environments for the German Quantum Communication Community
- Support Quantum Communication standardization and certification

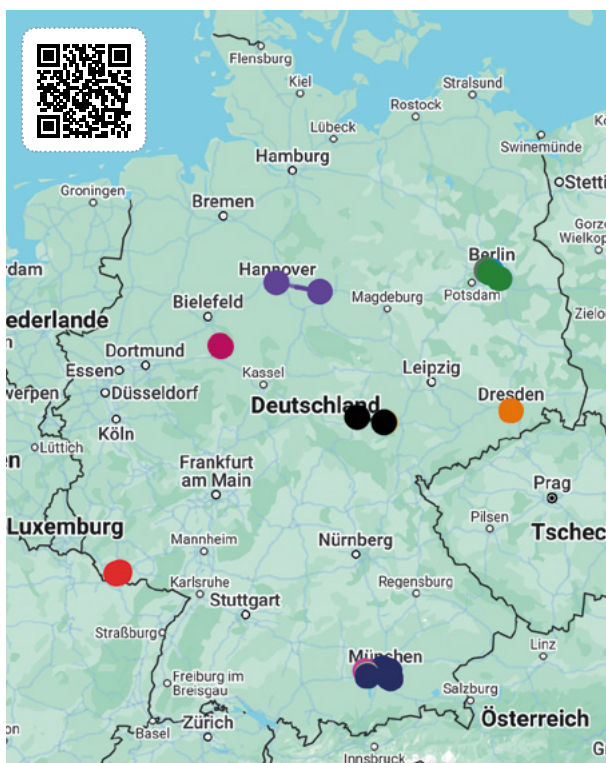


SQuaD is committed to networking, e.g. through joint workshops with other networks such as the Munich Quantum Network (MuQuaNet) © UniBw M/Siebold

QCom Community and Testbeds

Within the SQuaD network, key players from research and industry, such as QuNET, QR.X, and DivQSec, collaborate, learn, and benefit from each other. Activities include standardization and certification with the German Institute for Standardization (DIN) in order to validate commercial exploitation strategies.

SQuaD is the central point of contact for expertise and infrastructure of Quantum Communication in Germany. An interactive testbed map provides a unique overview of planned and existing testbeds for Quantum Communication.



Overview of testbeds for QCom research and development provided on the SQuaD website.

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SQaD supports Technology Transfer through:

- Providing testbeds
- Workshops and joint ventures
- Patent and start-up consulting
- Online information platform
- Roadmap for QCom technologies
- Training and further education offers
- Support of standardization and certification

More Information:

Become part of Germany's
growing networking platform
for QCom!

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