

QR.X-SQuaD-Workshop

Agenda

February 22nd-24th 2023

Physikzentrum, Bad Honnef

Zoom Link: <https://zoom.us/j/98491647976?pwd=Wks2b1RvRmpDbDlrMG5MU24xNWExdz09>

Meeting ID: 984 9164 7976

Passcode: 906320

Wednesday, February 22nd:

Arrival/registration till 12:00 h

12:30 -13:45 h Lunch (optional)

14:00 – 15:30 h Welcome (C. Becher/N. Spethmann)

 QR.X (C. Becher)

 QuNET (T. Goebel)

 SQuaD & overview industry-led projects (N. Spethmann)

15:30 – 16:00 h Coffee break

16:00 – 18:00 h SQuaD – presentation of industry-led projects within the innovation-hub I

 Tobias Fehenberger: DE-QOR: Development of a high-performance CV-QKD module for fiber-optical networks

 Felix Wissel: QKD@DT: DemoQuantDT

 Xenia Bogomolec: Quant-ID - Quantum-secure digital identities

 Oliver Holschke: QUIET: Towards architecture and demonstration of an IoT system (end-to-end) that leverages quantum sensing and quantum communication

18:30– 20:00 h Dinner

20:15 - 22:00 h Internal meeting of the SQuaD-projects I

Thursday, February, 23rd:

08:00 – 08:45 h **Internal meeting of the SQuaD-projects II (optional)**

09:00 – 10:00 h **SQuaD – presentation of industrial led projects within the innovation-hub I**

Riccardo Bassoli: 6G-QuaS

Kevin Füchsel: Q-Fiber: Multi-User QKD Networks with Innovative Optical Fibers

10:00 – 10:30 h Coffee break

10:30 - 13:00 h **Industrial perspectives of certification and standardization**

Dirk Fischer (BSI): Introduction BSI: basics of certification

Imran Khan (KEEquant): Industrial perspective I

Tobias Fehenberger (Adva): Industrial perspective II

Tobias Hemmert (BSI): BSI perspective

Ömer Bayraktar (MPL): QuNET perspective

Discussion: questions from the community/industry

13:00 – 14:15 h Lunch

14:30 – 16:00 h **Testbeds**

Thorsten Goebel: Testbeds from the QuNET environment

Christoph Becher & Harald Weinfurter: Introduction of the currently available testbeds (QR.X, München)

Nicolas Spethmann: SQuaD testbeds, requirements and extensions of testbeds, possibilities within SQuaD

16:00 – 16:30 h Coffee break

16:30 – 18:00 h **Poster session I**

18:30 – 20:00 h Dinner

20:30 - 22:00 h **Poster session II & discussion**

Friday, February 24th:

09:00 – 10:30 h 6G presentations

Christian Deppe: 6G-life Digital Transformation and sovereignty of future communication networks (6G-life)

Janis Nötzel: Quantum communication techniques in the context of commercial networks (6G-life)

Riccardo Bassoli: The integration of quantum technologies in future 6G networks (6G-life)

10:30 – 11:00 h Coffee break

11:00 - 12:00 h

Dennis Pohle: Novel architectures for quantum communication using single photons and entangled photons (QUIET)

Simon Sekavčnik: Quantum network simulators from a broader perspective (QuaPhySy)

Caspar Hopfmann: Towards a local area hybrid quantum-5G network (QD-CamNetz)

12:00 – 12:30 h Concluding discussion

12:30 h: Lunch (optional)