

ORIENTATION MEETING (OM) & COMPLEMENTARY-SKILLS WORKSHOP 1 (CS1)

NETWORK QUANTUM-SAFE INTERNET (QSI)

Deliverable 5.1 / WP5



Picture 1. Group picture of the attendees to the OM & CS1 held at the University of Amsterdam, in June 2023.

Organization

Place: University of Amsterdam.

Organizer beneficiary: University of Amsterdam (Prof. Christian

Schaffner, Director of Training of QSI).

Dates: 26-30 June 2023.

Agenda: Please see Agenda below.

Summary

As originally planned, the Orientation Meeting (OM) and the complementary-skills workshop 1 (CS1) took place at the University of Amsterdam within the first 6-9 months of the network, once



most of the Doctoral Candidates (DCs) have been already recruited by the beneficiary partners. The main goal of the OM and CS1 is to provide the DCs with:

- An overview and context of the QSI programme.
- An opportunity to develop a spirit de corps and form a strong and effective network.
- An overview and introduction to all aspects of being a PhD student.
- The opportunity to meet with their network and secondment supervisors.

This event was designed to include as well a Supervisory Board (SB) meeting, and a sandpit meeting to discuss (among the scientists-in-charge/supervisors) how to implement and enhance research collaborations within the network.

As explained below, all these goals have been successfully achieved.

Agenda

The detailed agenda of the OM and CS1 was the following:

Monday, June 26, 2023.

Start	End	Who	What	Where
14:00	15:30		Hotel Check-in	Hotel Casa.
15:00	15:30	Everybody	Walk-in & Reception	Hotel Casa.
15:30	16:00	Everybody	Introduction Meeting (Game: I am the only one)	Hotel Casa.
16:00	16:40	Everybody	Walk	Hotel Casa to Stadhouderskade 550
16:45	18:00		Boat Tour	Stadhouderskade 550
18:45		Everybody	Dinner	Vergulden Eenhoorn

This was the first time for all the project members to meet each other. The day was organized with various ice-breaking activities for the whole group, as described in the table above. This significantly helped the attendees to quickly get to know each other in a friendly and relaxed environment.

Tuesday, June 27, 2023.

Start	End	Who	What	Where
9:00	9:20		Welcome & coffee/tea	L3.35: <u>LAB42</u>
9:20	9:30	Marcos Curty	QSI project kick-off	L3.35
9:30	12:00	Whole group	Presentations	L3.35
9:30	10:30		10 Presentation slots of about 5min each	L3.35
10:30	11:00		Break	L3.35
11:00	12:00		9 Presentation slots of about 5min each	L3.35
12:00	13:15	Everybody	Lunch	Café Neo (L3.35 stays available)



12:45	13:45	Marcos, Mohsen, Chris, Andrew, Eleni, Alexander May, Paolo, Andreas, Hugo, Florian Fröwis, AP Rep, DR Rep	Supervisory Board Meeting	L3.26
13:45	17:15	Seniors	Collaboration opportunities	Speeddating en collaboration: L3.35 (13:15-17 u) L3.05: 15:30-17:30 u L3.11 en L3.03: 14:30-17:30 u
13:45	17:15	Juniors	Complementary Skills Workshop	L1.11
17:30	18:30	Everybody	Reception	Restaurant Polder
18:30		Everybody	Dinner	Restaurant Polder

On June 27 2023, after a coffee/tea break, the coordinator of the network (Prof. Marcos Curty) officially welcomed all the attendees and provided an overview of the QSI network, making special emphasis on the highlights and main activities that will be developed in the next months.

After that, each attendee formally introduced himself/herself to the group, indicating their studies, background, professional career, scientific interests, and hobbies, inter alia. In total, we had 19 presentations of about 5min each. This activity gave all the project members the opportunity to know about each other's work and research interests, as well as to learn some personal aspects.

In the afternoon, a Supervisory Board (SB) meeting took place, where at least one representative from each beneficiary partner was present, together with various representatives from the associated partners. In addition, all DCs that were interested in attending the meeting were invited to participate as well. The attendees to the SB meeting were:

- Beneficiary partners:

(*Presential*): Prof. Marcos Curty (University of Vigo), Prof. Alexander May (Ruhr-Universität Bochum), Prof. Christian Schaffner (Universiteit van Amsterdam), Prof. Andreas Hülsing (Technische Universiteit Eindhoven), Assit. Prof. Kathrin Hövelmanns (Technische Universiteit Eindhoven), Prof. Christian Majenz (Danmarks Tekniske Universitet), and Dr. Alex Grilo (Sorbonne Université).

(*Online*): Prof. Eleni Diamanti (Sorbonne Université), and Prof. Paolo Villoresi (Università Degli Studi di Padova).

Associated partners:

(*Presential*): Prof. Mohsen Razavi (University of Leeds), and Dr. Mirko Pittaluga (Toshiba Europe Limited).

(*Online*): Dr. Rob Thew (University of Geneva), Gianluca Boso (IDQuantique), and Dr. Simon Daum (genua GmbH).



- DCs:

(Presential): Gina Muuss (Universiteit van Amsterdam), Fabrizio Sisinni (Danmarks Tekniske Universitet), Silvia Ritsch (Technische Universiteit Eindhoven), Javier Rey Dominguez (University of Leeds), Matias Ruben Bolaños Wagner (Università Degli Studi di Padova), Álvaro Yángüez Bachiller (Sorbonne Université), Alessandro Marcomini (University of Vigo), Vaisakh Mannalath (University of Vigo), and Massimo Ostuzzi (Ruhr-Universität Bochum), acting Silvia Ritsch as the DC representative.

- Project Manager:

(Presential): Lorena González Curra (University of Vigo).

In the SB meeting it was discussed the final composition of this Board, as well as different issues related to the organization of the network, the QSI website, and the deliverables that are expected in the following months. A summary of the topics discussed in the meeting is appended at the end of this report.

After the SB Meeting, two parallel sessions took place: one of them meant for the scientists-in-charge/supervisors of the network, and the other one dedicated to the DCs.

The first one consisted in a sandpit meeting to possible ways to enhance research collaborations within the network. This session lasted about three and a half hours and was chaired by Silke van Beekum, from the Reflect Academy in Netherlands. It consisted on various group exercises proposed by Silke van Beekum, and a final open discussion.

The later one was actually the beginning of CS1 for the DCs. This session was chaired by Christianne Vink, also from the Reflect Academy in Netherlands. It started with a short introduction in which the DCs had the opportunity to introduced themselves, sharing details such as where they are from and how different life is now compared to their home country. After, they had an exercise about the qualities that are needed to be a good researcher, as well as ways to develop them. Also, different challenges and how they could affect their daily research habits were presented and discussed. This exercise was done in groups. Finally, an outline for their individual research was developed.

The day finished with a joined reception and dinner between all the attendees.

Wednesday, June 28, 2023.

Start	End	Who	What	Where
9:00	12:30	Juniors	Complementary Skills Workshop	L3.35
9:00	12:30	Seniors	Supervisor Workshop	L2.06
12:30	13:30	Ledereen	Lunch	Café Neo
13:30	17:15	Juniors	Complementary Skills Workshop	L3.36

On Wednesday 28 2023, the scientists-in-charge/supervisors of the network attended a Supervisory Workshop chaired by Silke van Beekum, where it was discussed different aspects about the supervisory of PhD students and how to be a good supervisor, including issues like cultural dimensions in the supervision of students.



On the other hand, the DCs completed the CS1 workshop, which was again chaired by Christianne Vink. In particular, they had a full-day workshop from 9:00 till 17:15 where they began by discussing attention management and tips and tricks for better focus while working, such as drowning out external distractions and reminding themselves to take breaks. It was also discussed issues related to time management. The session in the afternoon was dedicated to metacognition and their personal character traits. In groups, the DCs could discuss how their character types could help them do successful research. They ended the workshop by reflecting on what they have learned and how they plan to implement it into their daily lives and research.

Thursday 29 and Friday 30, June 2023.

Start	End	Who	What	Where
10:00	17:00	Juniors	QSC Training day for DCs	CWI / Congress centrum

Start	End	Who	What	Where
10:00	17:00	Juniors	QSC Training day for DCs	CWI / Congress centrum

On June 29 and 30 2023, the DCs attended the "QSC 4th Quantum Training on quantum-safe cryptography" that was held in Amsterdam and organized by the AP of the QSI network CWI, at Amsterdam Science Park. In this event, Lisa Kohl (CWI, Amsterdam) and Peter Bruin (MI, Leiden) gave introductory lecturers on post-quantum cryptography. This Quantum Training was opened to other attendees (beyond the DCs), mainly focused to PhD students and postdocs, though Advanced MSc students were welcome to attend as well. The agenda of this training included:

June 29, 2023:

- What is cryptography? Cryptographic models and assumptions
- What will quantum computers break?
- Modular arithmetic, Shor's algorithm
- Exercises
- Borrel (drinks, snacks and socialising)

June 30, 2023:

- Quantum-safe cryptographic assumptions
- Quantum-safe encryption schemes
- Explanation of some NIST candidate schemes
- Exercices.

The schedule of each of both days was organized as follows:

Schedule of both days:

10 - 10.45: First lecture

11 - 11.45: Second lecture

12 - 13.00: Exercises

13 - 14.00: Lunch

14 - 14.45: Third lecture

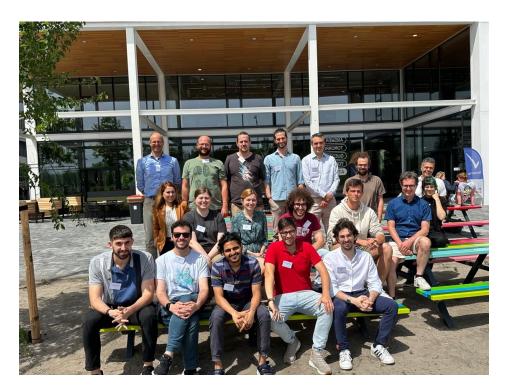
15 - 15.45: Fourth lecture

16 - 17.00: Exercises

Pictures of the OM & CS1



Picture 2. Picture on June 27, 2023, during the "Presentations" session held at the University of Amsterdam.



Picture 3. Second group picture of the attendees to the OM & CS1 held at the University of Amsterdam.



Picture 4. Picture of a social dinner organized on the OM & CS1 held at the University of Amsterdam.

Summary of the topics discussed on the SB meeting celebrated on June 27, 2023.

Main topics discussed include the following:

- Composition of the SB.

The composition of the SB, as well as the roles of each SB member were discussed and decided.

Preparation of deliverables.

The preparation of several deliverables that are due in the next months was discussed. In particular:

- QSI Website: An update on the status of development of the website was provided. Also, various possibilities for access control to the private area of the website were discussed and decided. This includes access to two restricted repositories, one meant for the DCs and supervisors, and the other one only meant for the supervisors.
- Carreer Development Plan: A common template will be created and revised by the Director of Training (Prof. Christian Schaffner).



- Data Management Plan: A first version of the DMP will be prepared by the Director of Research (Prof. Eleni Diamanti) and will be revised by all the scientists-in-charge/supervisors.
- Plan for Dissemination and Exploitation: A first version will be prepared by the Chair of the Dissemination & Impact Committee (Prof. Mohsen Razavi) and will be revised by all the scientists-in-charge/supervisors.
- School on Quantum Communication: This School will be held in Padova (Italy), and it was decided to fix the dates before September. Two possible alternatives include this Autumn or the beginning of next year.
- School on Post-Quantum Communication: This School will be organized by Technische Universiteit Eindhoven, and will include a complementary-skills workshop 2 organized by Ruhr- Universität Bochum. It will probably be held in March 2024, though the exact dates and location must still be decided.
- Mid-term check meeting: It was agreed to discuss with the PO about its contents and possible dates.
- **Outreach activities:** It was reminded to all DCs their commitment to do outreach activities, at least one per year, following the indications of the Grant Agreement.
- Secondments: It was reminded to all attendees the importance of doing secondments (both in academic and industry partners), and what is included in this regard in the grant agreement.