



Outreach and public engagement will be an important part of QCALL. Each ESR will be involved in several outreach activities during their PhD.

QCALL Open Day

26 May 2021, 4pm-6pm (British summer time)

Members of the public are invited to attend a public lecture on Quantum Communications for All, given by our own coordinator, Professor Mohsen Razavi of University of Leeds. You will also get to meet with some of our lead scientists and early-stage researchers who would be more than happy to answer your questions and engage in discussions. To register for this event please visit [here](#). The talk will be given in English, but some member of our team would be able to speak in other languages including French, Italian, German, Greek, Spanish, Portuguese, Chinese, Hungarian, and Farsi.

QCALL Videos

Check out the following videos, created by our own ESRs, to explain in simple words what quantum communications is about and how this project has contributed to its advancements:

Basic Principles:

<http://www.qcall-itn.eu/site/wp-content/uploads/2016/10/QCALL-Video-1.mp4>

Theoretical Contributions:

<http://www.qcall-itn.eu/site/wp-content/uploads/2016/10/QCALL-Video-2.mp4>

Experimental Contributions:

<http://www.qcall-itn.eu/site/wp-content/uploads/2016/10/QCALL->



Video-3.mp4

Story of the month: You on Spotlight

In April we also had a few ESRs on the Spotlight.

Have you ever heard about Quantum Internet?! Check out Yumang Jing's post from Leeds University on Quantum repeaters, an enabling technology for future quantum networks.

If you are interested to learn about "Timelock" and how it is related to QKD, make sure to read about Nilesh Vyas research post titled: "Quantum Cryptography using Quantum Computational Timelock"

Davide Rusco one of our experimentalist ESRs has shared his research on secure digital communications and cryptography in action. Please have a read here to learn more on the practical advancements in the field.

In March we had a few ESRs on the Spotlight.

If you are interested to learn about Quantum satellites living above your heads and talking in secret code check out Caro Liorni post on Cryptography and Satellites in Quantum era!

Mujtaba Zahidy, our ESR at Padova University, is also talking the art of communication, how to securely communicate in free space in his post about Free-space Quantum Key Distribution.

Following the above where Carlo and Mujtaba explained QKD, Shouvik Ghorai our ESR based at UPMC has created some FAQ page around cryptography and talked more about Continuous-variable Quantum Cryptography.



In this interesting video our ESR Guillermo Lorenzo takes you through the steps on "How to prove the security of a QKD protocol".

Róbert Trényi, our ESR at University of Vigo, has shed light on the challenges of quantum key distribution protocols and how to overcome them. Check out his post to learn more!

And finally our other ESR in University of Vigo, Margarida Pereira, is explaining how the concept is operationalised in her recent post: Quantum key distribution - from theory to practice.

In February Mirko Pittaluga was also on the Spotlight. If you are interested to know how Quantum Key distribution can make communications more secure read his post on Experimental Twin Field Quantum Key Distribution.

In January Federico Grasselli was on the Spotlight. If you are interested to know more about quantum conferencing check his recent piece on multi-party quantum key distribution.

We had another interesting piece on Spotlight by our creative ESR, Hamid Tebyanian, on Trusted randomness for quantum communication applications. He has shared his research in a video, check it out here.

"Anyone who considers arithmetical methods of producing random digits is, of course, in a state of sin.", John Von Neumann, In October we had Gaetan Gras to talk about IDQ's QRNG chip for mobile phones and how they have escaped the state of sin!

In September we had Innocenzo De Marco on the spotlight. Here you can learn about chip-based technologies for quantum communications!

In August we had Antonio Ortu on the spotlight. Here you can read his story on solid-state crystals for quantum repeaters!



Past Events

- The international School of Oporto 2018
- Be Curious 2018, British Science Week
- UK National Quantum Technologies Showcase 2017
- Nuit de la Science Geneva 2018
- VentoNight 2018, La Notte dei Ricercatori
- Fete de la Sciences, Paris 2018
- Public Evening at The International Conference on Quantum Computing (ICoCQ)

- 'Fete de la Sciences' organized by Équipe de la Fête de la Science Sorbonne Universités
10-12 October 2018

- One group one school: June/July 2018 and Fête de la Science
(<http://www.fetedelascience.fr/>), 10-18 November 2018

- "La notte dei Ricercatori" in Padova, Italy