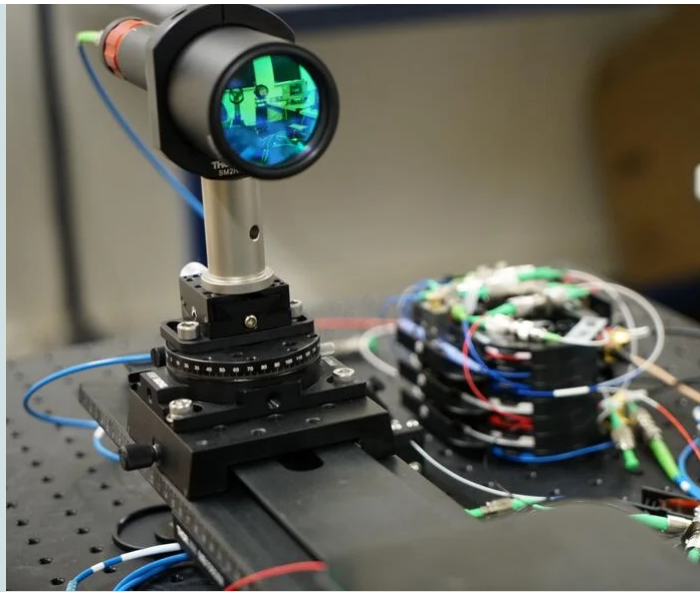


Hi there, welcome to the EPSRC Quantum Communications Hub Quarterly Newsletter. Here you can keep up to date with the latest news, events and opportunities associated with the Hub!

In this edition you can read about the site chosen for our Hub Optical Ground Station (HOGS), the QNetworks 2022 event, upcoming workshops, specific applications of Hub work relevant to the transport and healthcare sectors, our outreach work to inspire the next generation of quantum technologists and more. We wish everyone a great summer!

New round of Partnership Resource Funding now open

Our current round of partnership resource funding is now open! This scheme is aimed at supporting new collaborations, closely aligned with the work of the Hub, and new capabilities. The deadline for submissions is midday on September 20th and the guidelines as well as examples of previously successful proposals can be accessed in the [relevant website section](#).



Errol Aerodrome chosen to host new quantum Optical Ground Station for secure satellite connectivity

A satellite ground station facility at Errol Aerodrome, a former WWII RAF airfield between Dundee and Perth, has been chosen for a new state-of-the-art optical ground station (OGS) to demonstrate and test satellite quantum secure communications. The new facility will be developed as part of our Quantum Communications Hub's programme of space work with funding through the UK National Quantum Technologies Programme, and it will enable national and international research teams to connect to satellites with quantum secure communication payloads.

The Errol OGS project is a joint venture between Hub researchers at Heriot-Watt University and Dundee Satellite Station Ltd. (formerly University of Dundee Satellite Receiving Station), which is a commercial station offering a range of services to the UK and international space sector. The Errol site, which is located on the bank of the river Tay, was selected by the research team following an internal competitive process. This utilised extensive modelling of key variables (light pollution, cloud cover, sight lines, etc.) for all proposed sites, to identify the optimal site with potential for a high rate of quantum (encryption) key generation from the satellite communications.

The Hub's in-orbit demonstrator mission is one of three complementary quantum communications research projects currently undertaken by UK organisations; the other two being the UK/Singapore bilateral mission (project Speqtre) and the ROKS mission, with Hub academic and industry partners involved in all three projects.

[Read More](#)



CERN Collaboration Building event

Between 11th - 14th July 2022, CERN will be visiting different locations within the UK to spark innovation partnerships with companies in the quantum industry. These events will provide an opportunity to find out how CERN's expertise and technology can benefit your company, and are also a chance to meet CERN's Knowledge Transfer team one-on-one to discuss potential collaboration opportunities.

11 July – Oxfordshire

12 July – London

13 July – Birmingham

14 July – Glasgow

More information and registration in the event page: <https://lnkd.in/gTqi6Gjf>



July 11 - July 14 2022
Register now!



UK EVENT:
Collaborate with CERN to develop innovations in
quantum technology

QNetworks 2022

Researchers and members of quantum industry from around the world came together in Cambridge and online, on Monday 11 and Tuesday 12 April 2022, at the second instalment of the Hub organised QNetworks international workshop. The workshop, which had over 350 registrations, saw esteemed speakers from Canada, Germany, the Netherlands, Spain, the USA and the UK present on the latest advances in quantum networking.

[Read more about the event](#)





Online Workshop on Next Generation Protocols beyond QKD - 13 September 2022

The Quantum Communications Hub will be hosting an online workshop on next generation protocols beyond QKD. The workshop is based on recommendations from earlier events last year, jointly organised by the Hub and NCSC on quantum communications and cyber security. To facilitate focused discussions, this workshop is by invitation only. The purpose is to bring together experts from the cyber security and quantum communities in order to discuss the capabilities and potential applications of protocols beyond those of standard Quantum Key Distribution (QKD).

The protocols discussed at length on the day will be:

- Quantum money and secure quantum tokens
- Quantum position authentication
- Quantum message authentication
- Quantum fingerprinting

If you are interested in attending, please contact us via the enquiries@quantumcommshub.net inbox.

Save the Date: Quantum Technologies Showcase 2022

Quantum Technologies Showcase 2022

Queen Elizabeth II Centre
London | SW1P 3EE



InnovateUK
KTN



The UK National Quantum Technologies Showcase 2022 will take place on **Friday 11 November 2022** at the Queen Elizabeth II Centre, London, SW1P 3EE.

The showcase will feature some of the UK's most exciting projects from across the quantum landscape demonstrating the advancing commercialisation and industrialisation of quantum technologies in the UK. The showcase will also demonstrate the success and progress of the UK National Quantum Technologies Programme. Our Quantum Communications Hub researchers will be there with a large stand showcasing a number of our technologies across all work strands; make sure to come and find out more!

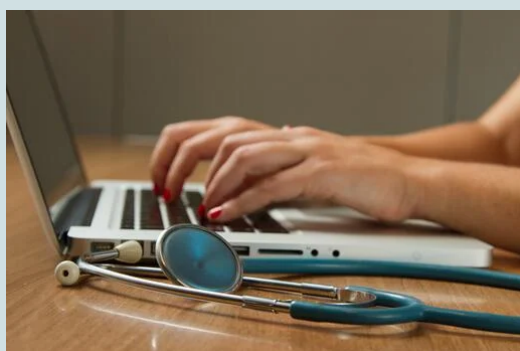
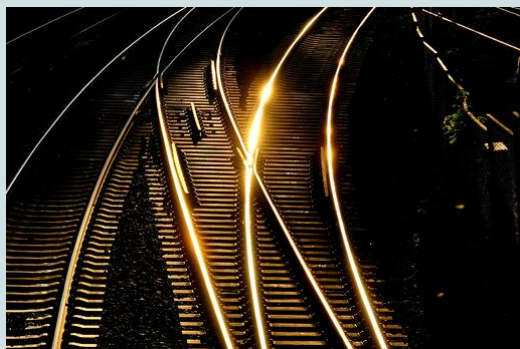
Involving several businesses from supply chain, technology developers, and end users, the programme aims to accelerate the translation of quantum technologies into the market to boost UK business and make a real impact to our everyday lives.

Attendees will leave the showcase with an understanding of quantum capabilities that are close to market, real-life uses of quantum technologies and hear about the many success stories of the ever growing British quantum industry.

Securing the communications of the UK's transport sector

Technologies developed by Quantum Communications Hub researchers or through projects funded by the Hub will be fundamental to the future security of the UK's transport sector.

[Find out more](#)



Future proofing cyber security for the healthcare sector with quantum communications

Quantum networks, national and local, will be essential to the security of the healthcare sector. Find out more about the work the Quantum Communications Hub is doing to develop and commercialise quantum networks and how this will be relevant to the healthcare sector.

[Find out more](#)

Careers in Quantum Technologies Assembly for Secondary Schools

In an effort to inspire the next generation of quantum technologists and to spread the word regarding the exciting careers available in the field of quantum communications, the Hub recently organised an online assembly on careers in quantum communications technologies, specifically aimed at secondary schools, in partnership with the [STEM Ambassador Hub South East England](#), part of Hub partner [STEM Learning](#). Watch the recording opposite or find out more on the [Hub website](#).

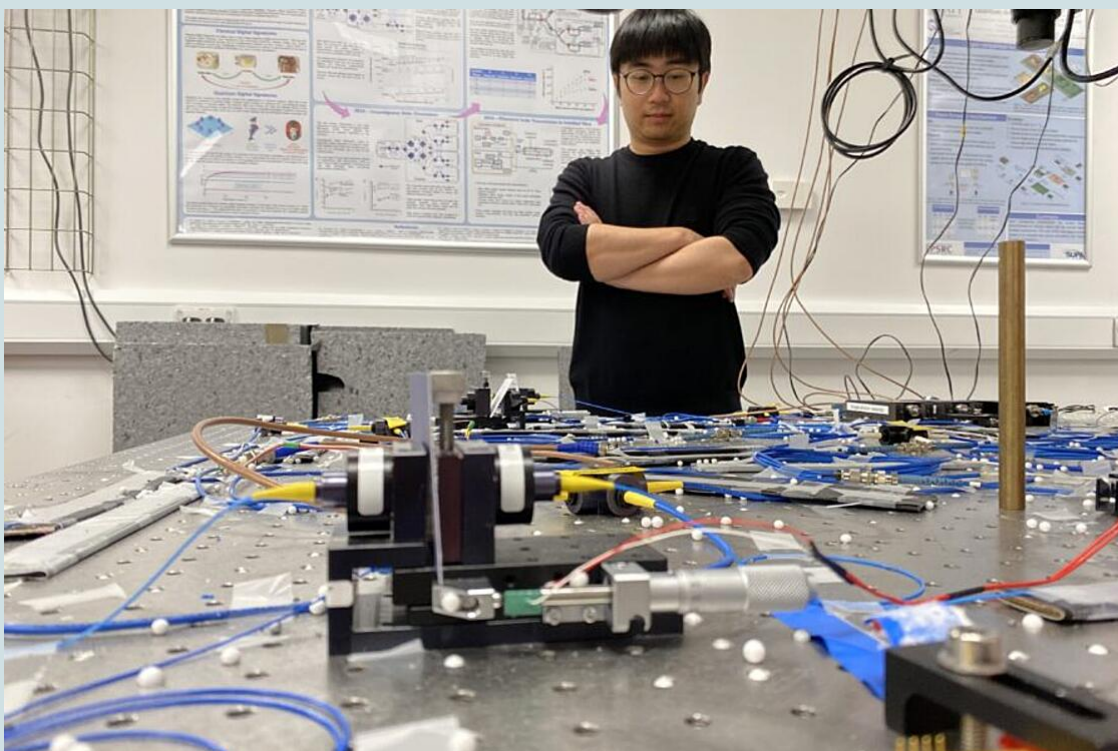


Quantum technology career development fellowship success

Congratulations are in order to our Hub researcher Dr Xin Yi! Dr Yi, who is based at Heriot-Watt University, is one of just 15 researchers in the UK to have recently been awarded a prestigious EPSRC Quantum Technology Career Development Fellowship.

Over the course of his five-year fellowship, for which he has been awarded £747,000, Dr Yi will develop a new class of short-wave infrared (SWIR:1400 – 3000 nm wavelength) quantum detector that will form one of the critical building blocks of quantum technology.

[Read More](#)

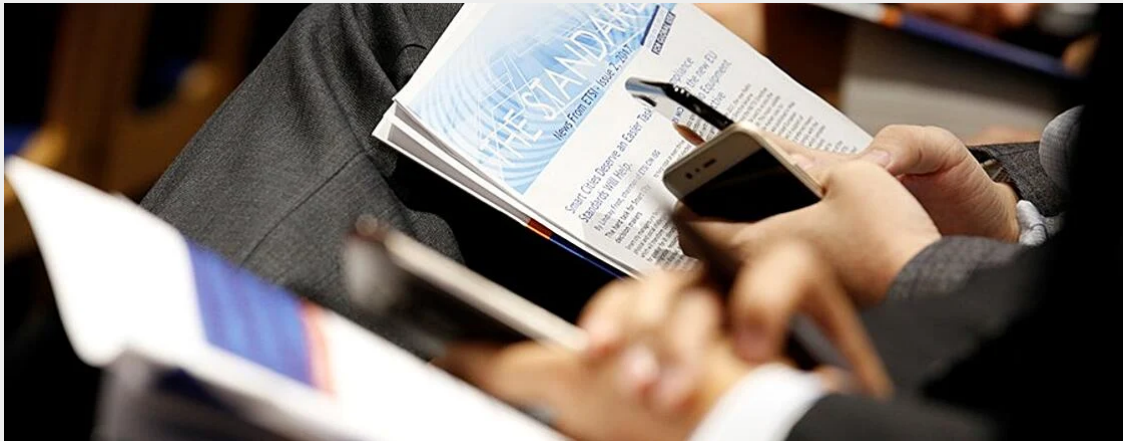


Work with us!

The Quantum Communications Hub welcomes enquiries about potential collaboration from those with interests closely aligned to our work. A number of options are available, including:

- Co-funded feasibility studies;
- Involvement in externally funded schemes, both national and international in scope.

If you'd like to find out more about collaboration opportunities, visit [our website](#) or contact us via enquiries@quantumcommshub.net



Events

[Computing.\(QCMC\)](#), 11-15 July 2022, Lisbon

[QCrypt 2022](#), 29 August - 2 September 2022, Academia Sinica, Taipei, Taiwan

[Photon 2022](#), 30 August - 2 September 2022, Nottingham

[EPIC Industrial Quantum Photonics Technology Summit at the University of](#)

[Glasgow](#), 7-8 September 2022, Glasgow

[Quantum.Tech](#), 19-21 September, London

[European Conference on Optical Communication](#) (ECOC), 18-22 September, Basel

[Quantum.Tech](#) 19-21 September 2022, Twickenham

UK National Quantum Technologies Showcase 2022, 11 November 2022, London

[ETSI Security Conference](#), 3-5 October 2022, Sophia Antipolis, France

[SPIE Photonex](#) & associated conferences including [Quantum Technology: Driving Commercialisation of an Enabling Science II](#), 6-8 December 2022, Birmingham

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