# EUROPE I N S I D E GUANTUM GUANTUM GUANTUM CONFERENCE OCTOBER 26-30, 2020

The future of Quantum computing, Quantum networking, Quantum sensors, and Quantum cryptography.

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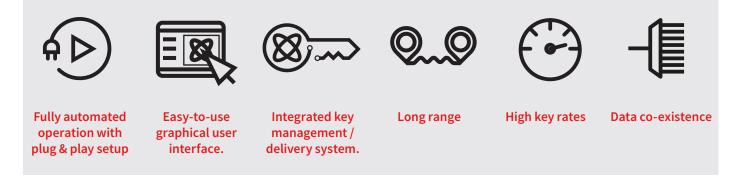
QUANTUM KEY DISTRIBUTION

### Securing the future of a digital society

By adopting Quantum Key Distribution, organisations can **protect their communication infrastructure** from today's vast array of cyber-threats, as well as those of tomorrow. Already, hackers are using techniques such as harvest and decrypt, where data is scraped and stored today with the aim of decrypting it once they have the capability to do so through advances with supercomputers, the realisation of a **quantum computer**, or the discovery of new techniques for cryptanalysis. With QKD, any data which requires **long-term protection** is not only secure in today's IT landscape, but also **future-proofed** to remain protected in the impending **quantum age**.

Robust levels of security are required in many sectors. In **healthcare**, the technology has been applied to ensure the secure transmission of genome data in Japan. Within the **public sector** QKD is used to provide government with secure communications, in the **finance industry** to **protect banking network infrastructure** and in **aerospace** and **pharmaceuticals** to protect high-value long-life **Intellectual Property**. Equally, in the age of IoT and smart cities, the necessity for a robust, **tamper-proof** and **ultra-sensitive infrastructure** is essential to ensure day-to-day life operates without disruption both now and in the future.

Toshiba is the world leader in high-speed quantum cryptographic systems. Based on decades of scientific research, we have taken on the challenges of this unexplored field and have pioneered the path to practical use.



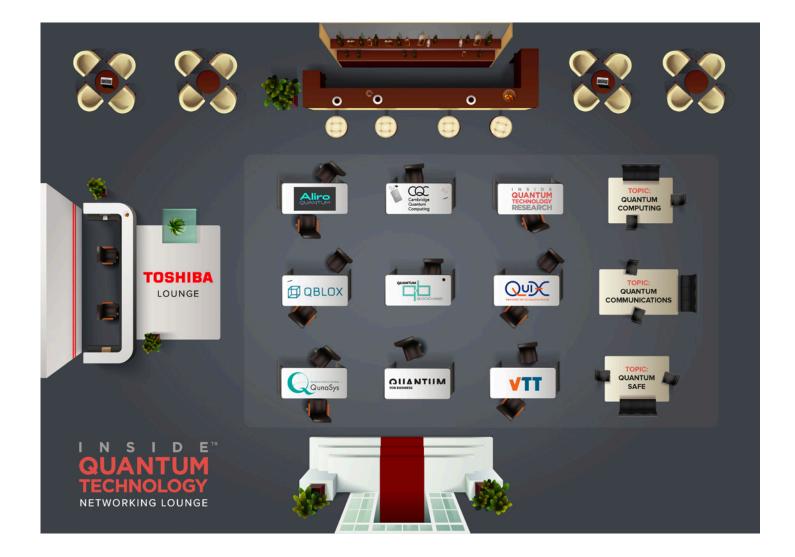
<u>Ouantum Cryptograph</u>



InfoQKD@toshiba.co.uk https://www.toshiba.co.jp/qkd/en Toshiba Europe Ltd, 208 Cambridge Science Park, Milton Road, Cambridge CB40GZ UK

### AN ONLINE CONFERENCE OCTOBER 26-30, 2020

DAY 1   MONDAY, OCTOBER 26, 2020		
Networking Lounge and Exhibit Hall		
13:00 CET (8:00 AM EDT)	Welcome and Introduction to our Sponsors and Exhibitors Guidance will be provided in how to join in the discussions at the tables or in the sponsor meeting rooms.	
13:20 CET (8:20 AM EDT)	Networking Lounge is open	
16:00 CET (11:00 AM EDT)	The Day's Wrap-Up	



#### Networking Lounge Hours | 14:30 CET (9:30 AM EDT) - 17:30 CET (12:30 PM EDT)

DAY 2	TUESDAY.	<b>OCTOBER 27</b>	. 2020

Quantum Computing	
12:30 CET (7:30 AM EDT)	Chairperson opens conference Speaker: Christopher Bishop — Chairperson, Chief Reinvention Officer, Improvising Careers
12:40 CET (7:40 AM EDT)	Review of the day ahead Speaker: Lawrence Gasman - Inside Quantum Technology, President
12:45 CET (7:45 AM EDT)	<b>Opening keynote:</b> Moderator: Kees Eijkel Speaker: <b>Ronald Hanson</b> — Chair of the Dutch National Agenda, Quantum Technology
13:10 CET (8:10 AM EDT)	The Debate on Quantum Advantage   Moderator: Lawrence Gasman   Speaker 1: Joseph Emerson — Founder and CEO of Quantum Benchmark, Fellow, CIFAR Quantum Information Science   Program, Institute for Quantum Computing & Department of Applied Mathematics, University of Waterloo   Speaker 2: Lieven Vandersypen — Co-Founder of QuTech, Co-Director of the Kavli Institute of Nanoscience and Antonie   van Leeuwenhoek Professor at Delft University of Technology, the Netherlands   Speaker 3: Robert Sutor — IBM Research - VP - IBM Quantum Ecosystem Development   Speaker 4: William Zeng — Head of Quantum Research, Goldman Sachs
14:05 CET (9:05 AM EDT)	Quantum computing: Technical and architectural trends Moderator: Kees Eijkel Speaker 1: Catherine McGeoch — Senior Scientist, D-Wave Speaker 2: Philip Makotyn — Sr. Quantum Marketing Manager, Honeywell Speaker 3: Ravi Pillarisetty — Senior Research Scientist, Intel
14:45 CET (9:45 AM EDT)	Break - Visit the Network Lounge

# VTT

# VTT to acquire Finland's first quantum computer

The development and construction of Finland's quantum computer will be carried out as an innovation partnership. The project will run for several years and its total cost is estimated at about EUR 20–25 million.

VTT is a multi-technological research organisation that provides R&D and pilot manufacturing services for components relevant for quantum industry. VTT has a long history and experience in working on commercial tunnel junction devices, such as SQUIDs, and detectors, including bolometers, for imaging. VTT has a strong track record of supporting fabless companies with small and mid-volume manufacturing needs.

More information: Himadri Majumdar Programme Manager, Quantum himadri.majumdar@vtt.fi +358 40 658 9596

### AN ONLINE CONFERENCE OCTOBER 26-30, 2020

#### Networking Lounge Hours | 14:30 CET (9:30 AM EDT) - 17:30 CET (12:30 PM EDT)

DAY 2   TUESDAY, OCTOBER 27, 2020 continued	
Quantum Computing	
14:45 CET (9:45 AM EDT)	Break - Visit the Network Lounge
15:05 CET (10:05 AM EDT)	<b>Keynote</b> Moderator: <b>Lawrence Gasman</b> Speaker: <b>Chiara Marletto</b> — Research Fellow at Wolfson College, University of Oxford
15:40 CET (10:40 AM EDT)	Emerging technologies and companies in quantum computing Moderator: Freeke Heijman Speaker 1: Himadri Majumdar — Program Manager, Quantum Technologies, VTT Technical Research Centre of Finland Ltd. Speaker 2: Tony Lawrence — Founder and CEO of Light Rider and VOR Technology Speaker 3: Adriaan Rol — Co-founder and Director of Research & Development, Orange Quantum Systems
16:20 CET (11:20 AM EDT)	Cryo, control and subsystems for quantum computing Moderator: Amber Van Hauwermeiren Speaker 1: Niels Bultink — Co-Founder CEO, Qblox BV Speaker 2: Hans van den Vlekkert — CEO, Quix Speaker 3: Tomek Schulz, Co-founder and CEO, kiutra
17:00 CET (12:00 PM EDT)	End of day – Chairperson closes Speaker: Christopher Bishop — Chairperson, Chief Reinvention Officer, Improvising Careers

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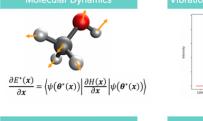
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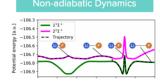
meet the team at our IQT conference booth or visit qblox.com

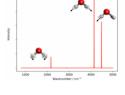
#### Networking Lounge Hours | 14:30 CET (9:30 AM EDT) - 17:30 CET (12:30 PM EDT)

DAY 3   WEDNESDAY, OCTOBER 28, 2020		
	Quantum Computing Software and Applications	
12:30 CET	Chairperson opens conference	
(7:30 AM EDT)	Speaker: Christopher Bishop — Chairperson, Chief Reinvention Officer, Improvising Careers	
12:35 CET	<b>Review of the day ahead</b>	
(7:35 AM EDT)	Speaker: Lawrence Gasman — Inside Quantum Technology, President	
12:40 CET	Presentation of IQT Research's Forecast of the Quantum Technology Market: Computers, Quantum Safe and the Quantum Networking	
(7:40 AM EDT)	Speaker: Lawrence Gasman - Inside Quantum Technology, President	
13:15 CET (8:15 AM EDT)	<b>Evolution of operating systems for quantum Computers</b> Moderator: <b>Doug Finke</b> Speaker 1: <b>Bettina Heim</b> — Senior Software Engineering Manager, Microsoft Speaker 2: <b>Damien Nguyen</b> — Physicist and Software Engineer/Researcher, Huawei, ProjectQ Speaker 3: <b>Iordanis Kerenidis</b> — Head of Quantum Algorithms International, QC Ware	









#### Benchmark & Create novel algorithms.

# **Quantum Chemistry**

# on Quantum Computer

#### QunaSys has strong capability of algorithm development for chemical calculation

Our core competence is the capability to develop algorithm to calculate key molecular properties essential for chemical industry. We currently have two offerings: (i) Joint research to develop novel algorithm for chemistry and (ii) Software tool named Qamuy, which enables you to do various chemical calculation on QC and analyze the impact on each company.



Website: https://en.qunasys.com/

E-mail: yan@qunasys.com

#### Networking Lounge Hours | 14:30 CET (9:30 AM EDT) - 17:30 CET (12:30 PM EDT)

DAY 3   WEDNESDAY, OCTOBER 28, 2020 continued			
	Quantum Computing Software and Applications		
14:00 CET (9:00 AM EDT)	Quantum emulators and hybrid systems Moderator: Victor Land Speaker 1: Ariana Torres — HPC/Quantum computing consultant, SURF Speaker 2: Richard Versluis — Principal Systems Engineer CSEP at TNO and Director Engineering of the Quantum Computing Division at QuTech Speaker 3: Steve Brierley — CEO and Founder, Riverlane		
14:40 CET (9:40 AM EDT)	Break - Visit the Network Lounge		
15:00 CET (10:00 AM EDT)	<b>Keynote</b> Speaker: <b>Harry Buhrman</b> — Executive Director of QuSoft, Professor of algorithms, complexity theory, and quantum computing at the University of Amsterdam		
15:35 CET (10:35 AM EDT)	<b>User experiences: Financial services industry</b> Moderator: <b>Dimitri van Esch</b> Speaker 1: <b>Carlos Kuchkovsky Jimenez</b> — Chief R&D and Technology Officer - New digital business, BBVA Speaker 2: <b>Jeffrey Cohe</b> n — Founder, Chicago Quantum and President, US Advanced Computing Infrastructure, Inc.		
16:00 CET (11:00 AM EDT)	User experiences: Aerospace and automotive Moderator: Koen Groenland Speaker 1: Michael Hayduk — Deputy Director, Information Directorate, AFRL Speaker 2: Thomas Strohm — Senior Expert / Coordinator of Quantum Technologies, Robert Bosch GmbH Speaker 3: Paolo Bianco — Global R&T Cooperation Manager, Airbus		
16:30 CET (11:30 AM EDT)	<b>User experiences: Pharma and chemicals industry</b> Moderator: <b>Lawrence Gasman</b> Speaker 1: <b>Govinda Bhisetti</b> — Principal Investigator and Head of Computational Chemistry Department, Biogen Speaker 2: <b>Benno Broer</b> — CEO, Qu & Co BV Speaker 3: <b>Toby Cubitt</b> — Director and Founder, Phasecraft		
16:55 CET (11:55 AM EDT)	End of day – Chairperson closes Speaker: Christopher Bishop — Chairperson, Chief Reinvention Officer, Improvising Careers		
17:30 CET (12:30 PM EDT)	Networking Lounge Closes		

# Be sure to visit the Networking Lounge

Monday, October 26, 2020 13:00 CET (8:00 a.m. EDT) to 16:00 CET (11:00 a.m. EDT) Tuesday, October 27, 2020 through Friday, October 30, 2020 14:30 CET (9:30 a.m. EDT) to 17:30 CET (12:30 p.m. EDT)



# RESEARCH

# Available to all paid attendees to IQT Europe

\*Offer expires 30 November 2020

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QUANTUM TECHNOLOGY

#### Networking Lounge Hours | 14:30 CET (9:30 AM EDT) - 17:30 CET (12:30 PM EDT)

DAY 4   THURSDAY, OCTOBER 29, 2020			
	Quantum Communications – Day Sponsored by <b>TOSHIBA</b>		
12:30 CET (7:30 AM EDT)	Chairperson opens conference Speaker: Christopher Bishop — Chairperson, Chief Reinvention Officer, Improvising Careers		
12:35 CET (7:35 AM EDT)	<b>Review of the day ahead</b> Speaker: <b>Lawrence Gasman</b> — Inside Quantum Technology, President		
12:40 CET (7:40 AM EDT)	Message from our sponsor		
12:45 CET (7:45 AM EDT)	<b>Keynote: Sponsor</b> Speaker: <b>Taro Shimada</b> — Corporate Vice President and Chief Digital Officer, Toshiba Corporation Speaker 2: Paul Crane Converged Network Research Director, BT		
13:15 CET (8:15 AM EDT)	Evolution of the Quantum Internet Moderator: Christopher Bishop Speaker 1: Mathias Van Den Bossche — Director, Telecommunication and Navigation Systems R&D, Thales Alenia Space Speaker 2: Saikat Guha — Director, NSF Center for Quantum Networks Associate Professor of Optical Sciences, Electrical & Computer Engineering, and Applied Mathematics, University of Arizona Speaker 3: Prineha Narang — CTO, Aliro Quantum, Evolution of the Quantum Internet		



#### **QUANTUM BLOCKCHAINS -** PROVABLY SECURE SOLUTIONS FOR THE NEXT GENERATION OF DISTRIBUTED LEDGERS

www.quantumblockchains.io

Quantum Blockchains Inc. is a startup aiming to create functioning Blockchain technology capable of resisting the currently emerging threats from Quantum Computers. The company is planning a radical step, and instead of post-quantum algorithms, it will use the latest achievements of quantum cryptography to create provably secure solutions, which enhance data protection, integrity and processing speed.

"A Simple Voting Protocol on Quantum Blockchain", International Journal of Theoretical Physics, 58, 275–281 (2019) "Towards Quantum-Secured Permissioned Blockchain: Signature, Consensus, and Logic", Entropy 2019, 21(9), 887

"Multi-Party Quantum Byzantine Agreement without Entanglement", Entropy 2020, 22(10), 1152

#### Networking Lounge Hours | 14:30 CET (9:30 AM EDT) - 17:30 CET (12:30 PM EDT)

DAY 4   THURSDAY, OCTOBER 29, 2020 continued		
	Quantum Communications – Day Sponsored by <b>TOSHIBA</b>	
14:00 CET (9:00 AM EDT)	Markets for QKD systems Moderator: Lawrence Gasman Speaker 1: Andrew Shields — Head of Quantum Technology at Toshiba Europe Speaker 2: Axel Foery — Executive VP Quantum-Safe Security, ID Quantique Speaker 3: Mehdi Bozzo-Rey — Business DevelopmentQuantum, Cambridge Quantum Computing	
14:40 CET (9:40 AM EDT)	Break - Visit the Network Lounge	
15:00 CET (10:00 AM EDT)	<b>Keynote</b> Speaker: <b>Stephanie Wehner</b> — Antoni van Leeuwenhoek Professor at Delft University of Technology and Roadmap Leader of the Quantum Internet and Networked Computing initiative at QuTech	
15:30 CET (10:30 AM EDT)	Message from our sponsor	
15:35 CET (10:35 AM EDT)	Applications and use cases for quantum communications Moderator: Jesse Robbers Speaker: Andrew Thain — Quantum Communications Point of Contact, Airbus	



### MEET THE QUANTUM EXPERTS

Cambridge Quantum Computing

CQC is a global leader in quantum software and quantum algorithms that helps our clients get the best out of existing and developing quantum computers.



#### Quantum Software Development Platform

t|ket><sup>™</sup> translates machine independent algorithms into executable circuits, optimizing for physical qubit layout while reducing the number of required operations. t|ket> enables our partners, collaborators, and clients to effortlessly work across multiple platforms to tackle some of the most intriguing problems in chemistry, materials, science, pharmaceuticals, and finance.



#### Quantum AI and Machine Learning

With our industry partners, we have pioneered the implementation of QML on today's NISQ devices using our proprietary quantum circuit learning methods in the finance space and beyond.

Quantum theory can be used to compute language meaning, allowing us to store and process vastly more words at greater speeds.



#### Quantum Chemistry

**EUMEN** is a complete computational chemistry software package that facilitates the design of pharmaceuticals, specialty chemicals, performance materials, and agrochemicals. Working across all sectors, we develop next generation quantum algorithms and methods to overcome the limitations of traditional quantum chemistry.

#### Quantum Cryptography and Cybersecurity

CQC has pioneered a quantum-based solution to eliminate security threats to digital data and communication. We ensure independence and source certifiability to be used for post-quantum encryption algorithms, entropy generation for IoT devices, key generation for certificates, quantum watermarking, and many other use cases.

Visit our website: www.cambridgequantum.com Stop by the virtual CQC booth at #IQT2020 to meet our team!

#### Networking Lounge Hours | 14:30 CET (9:30 AM EDT) - 17:30 CET (12:30 PM EDT)

DAY 4   THURSDAY, OCTOBER 29, 2020 continued	
Quantum Communications – Day Sponsored by <b>TOSHIBA</b>	
16:05 CET (11:05 AM EDT)	Quantum-safe solutions Moderator: Jesse Robbers Speaker 1: Bruno Huttner — Director of Strategic Quantum Initiatives, ID Quantique Speaker 2: Jaya Baloo — Chief Information Security Officer, Avast Software s.r.o. Speaker 3: Michele Mosca — Founder of the Institute for Quantum Computing, Professor in the Department of Combinatorics & Optimization at the University of Waterloo
16:35 CET (11:35 AM EDT)	Accelerating quantum technologies for communication and sensing Speaker: David Awschalom — Director, Chicago Quantum Exchange
17:05 CET (12:05 PM EDT)	End of day – Chairperson closes Speaker: Christopher Bishop — Chairperson, Chief Reinvention Officer, Improvising Careers
17:30 CET (12:30 PM EDT)	Networking Lounge Closes

# 

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#### Networking Lounge Hours | 14:30 CET (9:30 AM EDT) - 17:30 CET (12:30 PM EDT)

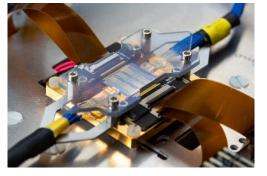
DAY 5   FRIDAY, OCTOBER 30, 2020		
	Quantum Sensors, Quantum Policy and Quantum Investments	
12:30 CET	Chairperson opens conference	
(7:30 AM EDT)	Speaker: Christopher Bishop — Chairperson, Chief Reinvention Officer, Improvising Careers	
12:35 CET	<b>Review of the day ahead</b>	
(7:35 AM EDT)	Speaker: Lawrence Gasman — Inside Quantum Technology, President	
12:40 CET	<b>Presentation by Women in Quantum</b>	
(7:40 AM EDT)	Speaker: <b>Denise Ruffner</b> — Chief Business Officer, Cambridge Quantum Computing	
12:55 CET (8:15 AM EDT)	Quantum sensor evolution Moderator: Lawrence Gasman Speaker 1: Jay Hendricks — Deputy Program Manager, NIST on a Chip Speaker 2: Kai Bongs — Director, UK National Quantum Technology Hub in Sensors and Metrology	



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#### Networking Lounge Hours | 14:30 CET (9:30 AM EDT) - 17:30 CET (12:30 PM EDT)

	DAY 5   FRIDAY, OCTOBER 30, 2020 continued	
	Quantum Sensors, Quantum Policy and Quantum Investments	
13:40 CET (8:40 AM EDT)	Jobs and education in the quantum technology sector Moderator: Menno Veldhorst Speaker 1: Araceli Venegas-Gomez — Founder & CEO, QURECA Ltd (Quantum Resources & Careers) Speaker 2: Dennis Rot — Director Quantum for Business, Cronos Groep Speaker 3: Ricardo Pérez-Castillo — Quantum Software Engineering, University of Castilla-La Mancha / aQuantum Speaker 4: Terrill Frantz — Associate Professor of eBusiness and Cybersecurity, Harrisburg University	
14:25 CET (9:25 AM EDT)	Break - Visit the Network Lounge	
15:00 CET (10:00 AM EDT)	Keynote: Quantum Networking: Emerging Applications and What's Needed Speaker: Prineha Narang, PhD — CTO, Aliro Quantum, Evolution of the Quantum Internet	
15:30 CET (10:30 AM EDT)	Message from our sponsor	

# Prepare for the Quantum Revolution

Quantum Technology will turn the world as we see it upside down. We're at a new dawn. Are you ready for it?

Quantum for Business is the **central** platform of Quantum Technology in **Europe** that **educates**, **connects and guides frontrunner businesses** who want to lead the quantum revolution. Our mission is to increase the adoption of Quantum Technology in the market by transferring the academic knowledge and **expertise** to businesses interested in leveraging the potential of quantum.

Prepare for the quantum revolution, join us at quantumforbusiness.eu



Networking Lounge Hours   14:30 CET (9:30 AM EDT) - 17:30 CET (12:30 PM EDT)			
	DAY 5   FRIDAY, OCTOBER 30, 2020 continued		
	Quantum Sensors, Quantum Policy and Quantum Investments		
15:35 CET (10:35 AM EDT)	Quantum Policy in Europe Moderator: Freeke Heijman Speaker 1: Tommaso Calarco — Director, Institute for Quantum Control, Research Center Jülich and Chair, EU Quantum Community Network Speaker 2: Pascal Maillot — Deputy Head of Unit HPC and Quantum Technologies, European Commission		
16:05 CET (11:05 AM EDT)	<b>Quantum-hubs in Europe</b> Moderator: <b>Kees Eijkel</b> Speaker 1: <b>Andrew Collins</b> — Lecturer and Enterprise Developer, University of Bristol, Quantum Technology Enterprise Centre Speaker 2: <b>Freeke Heijman</b> — Director Strategic Development, QuTech Special advisor to the Minister of Economic Affairs and Climate Policy on Quantum Technologies.		
16:45 CET (11:45 AM EDT)	VCs and the quantum sector in Europe Speaker 1: Stephen Nundy — CTO & Partner, Lakestar Speaker 2: Ton van 't Noordende — Position Founder, PHX Speaker 3: Ekaterina Almasque — General Partner, Open Ocean Speaker 4: Christophe Jurczak — Co-founder and managing partner, Quantonation		
17:15 CET (12:15 PM EDT)	<b>End of day – Chairperson closes</b> Speaker: <b>Christopher Bishop</b> — Chairperson, Chief Reinvention Officer, Improvising Careers		
17:30 CET (12:30 PM EDT)	Networking Lounge Closes		

#### QUANTUM COMMUNICATIONS DAY SPONSOR



#### **EXHIBITORS/SPONSORS**



## AN ONLINE CONFERENCE OCTOBER 26-30, 2020

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At Toshiba, our vision is to secure the world's communications from threats posed by advances in computing and mathematics. At a time when technological progress has created an almost constant state of data proliferation, the need for the secure transmission of sensitive information has never been more significant. It is essential to protect and future-proof data communication now through the advancement of reliable and ultra-secure quantum cryptography solutions. Our Quantum Key Distribution (QKD) offering applies the fundamental laws of Quantum Physics to secure network communications and is based on decades of scientific research.

# **SPONSORS AND EXHIBITORS**

#### **Aliro Quantum**

aliroquantum.com Will Finigan Co-Founder E: will@aliroquantum.com T: (857) 342-0043



Aliro Quantum is a distributed quantum computing cloud platform created by a team of researchers that spun out of Harvard's Quantum Information Science Lab in 2019. We are leading the charge on quantum network market creation by offering the foundational technologies needed for organizations around the world to build powerful quantum systems. An Air Force Research grant recipient, Aliro is already piloting the most accurate quantum network simulation tools while partnering with vendors including IBM Q Network, Rigetti, Honeywell Quantum Solutions, and Hyperion Research to make scalable quantum computing accessible.

#### **Cambridge Quantum Computing**

cambridgequantum.com Oliver Dent Sales Operations Manager E: Oliver.dent@cambridgequantum.com T: +44 7748 378567



Founded in 2014, CQC is a global leader in quantum software and quantum algorithms that help our clients get the best out of existing and developing quantum computers. Over the past several years, our team has grown to 70 + accomplished scientists focused on creating the best quantum software and cryptography solutions for our customers.

Our research helps the world's most innovative financial, chemical, material science, energy and utilities, automotive, defense, transportation and logistics companies to harness the transformative impact of quantum computing.

#### Inside Quantum Technology Research

insidequantumtechnology.com Lawrence Gasman President E: info@insidequantumtechnology T: 888-384-7144 QUANTUM TECHNOLOGY

Inside Quantum Technology is the only firm to be dedicated entirely to providing actionable information and analysis for the quantum technology sector. Quantum computer companies, quantum networking firms and service providers, as well as manufacturers of quantum sensors rely on our market research studies, twice-a-year business conferences and our daily news feed. We also serve the needs of materials firms, end users and investors. For more information contact info@ insidequantumtechnology.com

## AN ONLINE CONFERENCE OCTOBER 26-30, 2020

# **SPONSORS AND EXHIBITORS**

#### **Quantum Blockchain**

quantumblockchains.io Dr Mirek Sopek CEO, sopek@quantumblockchains.io, +1 551 226 5488



Quantum Blockchains Inc. is a startup aiming to create functioning Blockchain technology capable of resisting the currently emerging threats from Quantum Computers. The company is planning a radical step, and instead of postquantum algorithms, it will use the latest achievements of quantum cryptography to create provably secure solutions.

The company's founders have co-authored several recognized scientific papers which have established the theoretical basis for the technology. The project will use QKD (Quantum Key Distribution) to create a solution called a true "Quantum Blockchain" in which both cryptographic primitives and consensus algorithms are realized with the help of QKD.

#### **Qblox**

qblox.com Dr Niels Bultink CEO/Co-founder E: niels@qblox.com



At Qblox we operate at the frontier of the quantum revolution. With a dedicated team of scientists, engineers and developers we are pushing quantum technology to support scientists worldwide with our scalable and low-latency qubit control equipment. We are the sole providers of quantum control stacks that can be easily integrated with our customers' quantum computers. The stacks combine unlevelled noise performance, low-latency arbitrary control flows and can be scaled up to 100s of qubits. Our company is based in the Netherland and a spinoff of QuTech, which enables us to implement the latest scientific insights and take a position upfront in the worldwide race towards quantum advantage.

#### QunaSys

en.qunasys.com Tennin Yan CEO E: yan@qunasys.com T: +81-80-1345-2921



QunaSys is a software/algorithm development company for quantum computing (QC), with the strong focus on chemical calculation.

Our core competence is the capability to develop algorithm to calculate key physical properties essential for chemical industry and we have already proposed lots of industryrelevant algorithms by ourself or through joint-research with chemical/material companies.

We currently have two offerings: (i) Joint research to develop novel algorithm for chemistry and (ii) Software tool named Qamuy, which enables you to do various chemical calculation on QC and analyze the impact on each company.

#### Quantum For OLIANTUM FOR BUSINESS Business

quantumforbusiness.eu Dennis Rot Quantum for Business E: dennis.rot@quantumforbusiness.eu M: +31 6 55 14 18 13

Quantum for Business (QFB) is a European initiative with the mission of increasing the adoption of Quantum Technology in the market by transferring the academic knowledge and expertise to businesses interested in leveraging the potential of quantum. QFB is an agnostic non-profit entity that offers its members opportunities for inspiration, education and community building around Quantum Technology. QFB provides this value through a partner program that brings together knowledge from different players in Quantum Technology such as knowledge institutions, hardware/ software vendors, consultancy firms and quantum start-ups.

## AN ONLINE CONFERENCE OCTOBER 26-30, 2020

# **SPONSORS AND EXHIBITORS**

#### QuiX

quix.nl Dr. Catarina Taballione, Quantum System Engineer, E: c.taballione@quix.nl T: +31 6 39 27 11 68



QuiX offers a plug-and-play integrated and reconfigurable light-based quantum processor that accelerates the way to a quantum future.

QuiX delivers plug-and-play solutions for photonic quantum information processing. Our photonic processors enable arbitrary optical transformations while maintaining quantum coherence. The silicon nitride platform waveguide technology underlying our processors enables low loss and a high degree of reconfigurability. vttresearch.com/en/ourservices/ quantum-technology Himadri Majumdar Manager, Quantum Programmes E: himadri.majumdar@vtt.fi T: +358406589596

VTT's Quantum program is an ambitious, holistic approach to Quantum technologies, including Quantum computation. We invest in various different hardware and software innovations to solve problems related to computation, communication, sensors, metrology and algorithms. VTT's ongoing quantum computer procurement, based on superconducting platform, is only one aspect of our Quantum program. We are also actively seeking out industry collaboration on various emerging quantum hardware and software topics.

VTT is multi-technological research organization that provides R&D and pilot manufacturing services to companies, especially fab-less start-ups. VTT has long history and experience of working on quantum hardware for commercial applications. VTT operates in a dynamic ecosystem that includes additional service providers, suppliers, end-users and investors.