

QCI DAYS VIENNA 2024

AGENDA

Venue:
Haus der Industrie
 (Industriellenvereinigung)
 Schwarzenbergplatz 4, Vienna

Mittwoch, 24.01.2024 – Nationaler QCI-Tag

Moderation: Stefan Schauer (AIT Austrian Institute of Technology)

09:00-10:00

Registrierung

10:00-10:20

Eröffnung QCI Days Vienna 2024

Generalsekretär Mag. Christoph Neumayer (Vereinigung der Österreichischen Industrie)
 DI Georg Niklfeld (FFG Österreichische Forschungsförderungsgesellschaft)
 Univ.Prof. DI Dr. Andreas Kugi (AIT Austrian Institute of Technology)

10:20-11:10

Quantenkommunikation und die Strategie in Europa

Quantenkryptographie: Produkte und Supply Chain in Europa
 Hannes Hübel (AIT Austrian Institute of Technology)

Austrian World of Quantum – EuroQCI & Co
 Désirée Ehlers (Bundesministerium für Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technologie)

IRIS² – Secure Connectivity throughout Europe
 Daniel Voigt (Bundesministerium für Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technologie)

QKD für sicherheitsrelevante Anwendungen aus Netzbetreibersicht
 Felix Wissel (Deutsche Telekom)

11:10-11:40

Österreichische Use Cases

Sofortige Digitale Souveränität – trotz und gerade wegen neuer Quantencomputer
 Werner Strasser (fragmentiX Storage Solutions)

HSM Backup Using QKD
 Thomas Mann (CANCOM)

QKD and PQC – A Duet Pioneering the Secure Information Exchange via Videoconferencing
 Nikolaus Dürk (X-Net Services)

11:40-12:10

Paneldiskussion: Umsetzung QKD für den europäischen Markt

Moderation: Oliver Rolofs (COMMVISORY)

Hannes Hübel (AIT Austrian Institute of Technology)
 Désirée Ehlers (BMK)
 Daniel Voigt (BMK)
 Felix Wissel (Deutsche Telekom)
 Thomas Mann (CANCOM)
 Werner Strasser (fragmentiX Storage Solutions)
 Nikolaus Dürk (X-Net Services)



Mittwoch, 24.01.2024 – Nationaler QCI-Tag

12:10

Ankündigung Multilaterale EUREKA-Ausschreibung für Quantentechnologien

Michael Walch (FFG)

12:10-13:10

Mittagspause & Ausstellung

13:10-14:10

Cyber Security im Quantenzeitalter – Das Bedrohungspotential

Quanten-resistente Kryptographie für sichere Kommunikation
Sebastian Ramacher (AIT Austrian Institute of Technology)

Militärische Kryptographie im 21. Jahrhundert
Florian Silnusek (Bundesministerium für Landesverteidigung)

Quantentechnologie im Kontext von NIS2
Robert Lamprecht (KPMG)

Vertrauliche Daten und Öffentliche Sicherheit: Die Notwendigkeit sicherer Kommunikation in staatlichen Institutionen
Wolfgang Rosenkranz (CERT.at)

Post-Quantum-Ära und Digitale Signaturen: die Zukunft beginnt jetzt
Thomas Rössler (primeSIGN)

Kritische Infrastruktur und erste Schritte Richtung Quantenkryptografie
Julia Dewitz-Würzelberger (Verbund)

14:10-14:40

Paneldiskussion: Cyber Security im Quantenzeitalter

Moderation: Markus Klemen (SBA Research)

Sebastian Ramacher (AIT Austrian Institute of Technology)
Florian Silnusek (Bundesministerium für Landesverteidigung)
Robert Lamprecht (KPMG)
Wolfgang Rosenkranz (CERT.at)
Thomas Rössler (primeSIGN)
Clemens Möslinger (Bundeskanzleramt)
Julia Dewitz-Würzelberger (Verbund)

14:40-15:10

Kaffeepause & Ausstellung

fragmentiX Storage Solutions

qtlabs

Quantum Industries

X-Net

QND – Quantum Network Design



Mittwoch, 24.01.2024 – Nationaler QCI-Tag

15:10-15:50

Österreichische Quantentechnologie-Initiativen

Austrian Quantum Fiber Network – AQUnet
Thorsten Schumm (Technische Universität Wien)

Exzellenzcluster Quantum Science Austria
Gregor Weihs (Universität Innsbruck)

Quantum Society Austria: Connecting Students, Industry and Research in Austria
Somya Rathee (Quantum Society Austria)

Photonics Austria: Aktivitäten der AG Quanten
Martin Bohmann (Photonics Austria & qtlabs)

15:50-16:50

QKD-Technologien made in Austria

QCI-CAT: QKD-Deployment in Österreich
Martin Stierle (AIT Austrian Institute of Technology)

Technologie für weltraumbasierte Quantenkommunikation
Manuel Erhard (qtlabs)

Beyond Secure Communication: Sichere Speicherung durch Secret Sharing
Werner Strasser (fragmentiX Storage Solutions)

Post-quantum Signaturen für Java Security Provider
Simon Guggi (SIC Stiftung Secure Information & Communication Technologies)

Simulation von Quantennetzwerken
Wolfgang Dür (Institut für Theoretische Physik, Universität Innsbruck & QND – Quantum Network Design)

Quanten Technologien: An Investor's Perspective
Anna Spandl (Quantum Exponential)

16:50-17:20

Paneldiskussion: Österreichisches Quantenökosystem

Moderation: Martin Stierle (AIT Austrian Institute of Technology)

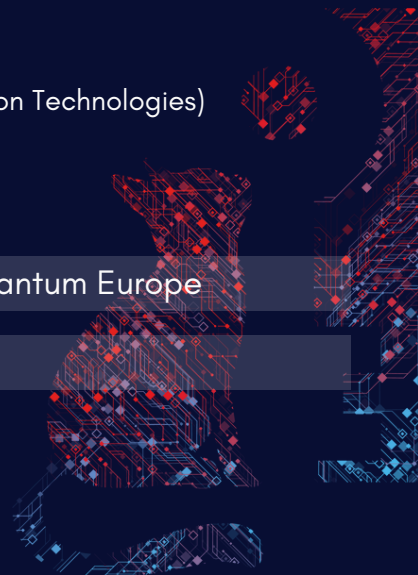
Manuel Erhard (qtlabs)
Werner Strasser (fragmentiX Storage Solutions)
Wolfgang Dür (Quantum Network Design)
Anna Spandl (Quantum Exponential)
Simon Guggi (SIC Stiftung Secure Information & Communication Technologies)
Somya Rathee (Quantum Society Austria)
Martin Bohmann (Photonics Austria, WG Quanten)
Gregor Weihs (Quantum Science Austria)

17:20-17:30

Schlussworte nationaler Tag: We are the Heart of Quantum Europe

17:30

Abendempfang





QCI DAYS VIENNA 2024

AGENDA

Venue:
Haus der Industrie
(Federation of Austrian Industries)
Schwarzenbergplatz 4, Vienna

Thursday, 25.01.2024 – QCI Days | Day 1

Moderation: Stefan Schauer (AIT Austrian Institute of Technology)

09:00-10:00

Registration & Coffee

10:00-10:10

Opening

Helmut Leopold (Head of Center for Digital Safety & Security, AIT Austrian Institute of Technology)

10:10-10:40

Overview EuroQCI

Quantum communication in the EU – EuroQCI: State of Play
Laurent Orlslager (European Commission – DG CNECT)

SAGA Project Overview and Status
Niklas Lindman (ESA European Space Agency)

EuroQCI Coordination and Support Action “PETRUS”
Keith Elder (Deutsche Telekom)

10:40-11:40

Quantum Communication in the Quantum Flagship

QSNP – Quantum Secure Networks Partnership
Valerio Pruneri (ICFO The Institute of Photonic Sciences)

QIA – Quantum Internet, the next step!
Stephan Ritter (TOPTICA Photonics)

Qu-Test – Supporting open Testing and Experimentation for Quantum Technologies
Alessandro Trenti (AIT Austrian Institute of Technology)

Qu-Pilot – Experimental Production Capabilities for Quantum Technologies
Mika Prunnila (VTT Technical Research Centre of Finland)

QUCATS – Coordinating the European Efforts in Quantum Technologies
Yasser Omar (PQI – Portuguese Quantum Institute)

QuIC – European Quantum Industry Consortium
Simone Capeleto (European Quantum Industry Consortium)

How to build a QCI Ecosystem
Jesse Robbers (Quantum Delta NL)

11:40-12:10

Panel Discussion: Quantum Communication in Europe

Moderation: Hannes Hübel (AIT Austrian Institute of Technology)

Laurent Orlslager (European Commission – DG CNECT)

Niklas Lindmann (ESA European Space Agency)

Keith Elder (Deutsche Telekom)

Valerio Pruneri (ICFO The Institute of Photonic Sciences)

Stephan Ritter (TOPTICA Photonics)

Yasser Omar (PQI – Portuguese Quantum Institute)

Simone Capeleto (European Quantum Industry Consortium)

Jesse Robbers (Quantum Delta NL)



Thursday, 25.01.2024 – QCI Days | Day 1

12:10-12:35

Supplier Pitches

LuxQuanta (Sergi Vizcaino)
KEEQuant (Ulrich Eismann)
Q-Bird (Ingrid Romijn)
QTI Quantum Telecommunications Italy (Alessandra Matteis)
ThinkQuantum (Simone Capalleto)
Quantum Industries (Felix Tiefenbacher)
ID Quantique (Gregoire Ribordy)
Toshiba Europe (Lee Johnson)
QuantLR (Nir Bar Lev)
KETS Quantum (Tom Crabtree)
qtlabs (Manuel Erhard)
fragmentiX Storage Solutions (Werner Strasser)

12:35-14:00

Lunch & Exhibition & Posters

14:00-14:20

Supplier Pitches

Quside (Carlos Abellan)
Single Quantum (Aliko Athanasiadou)
Quantum Optics Jena (Kevin Fuchsel)
QoolNET (Juan Pedro Brito)
Merqury Cybersecurity (André Xuereb)
QND – Quantum Network Design (Wolfgang Dür)
X-Net (Nikolaus Dürk)
CANCOM (Tobias Huemer)
dacoso (Christian Cehovin)
QDynamics (Aida Garcia)

14:20-14:30

Digital Europe Programme Pitches | DEP 1

eCausis (Anna Kaminska)
MDI-QUEEN (Ingrid Romijn)
QKISS (Baptiste Gouraud)
QUARTER (Marco Cofano)
SECRET (Imran Khan)
EQUO (Alessandro Zavatta)

14:30-15:20

QKD Networks and Architecture

Towards Large Scale SDN Quantum Networks
Vicente Martin (UPM Technical University of Madrid)

Exploring Cutting-Edge Architecture Developments for QKD Networks
Christoph Striecks (AIT Austrian Institute of Technology)

Hybrid Post-Quantum and QKD Protocols
Ludovic Perret (Sorbonne University)

Quantum Communications Between Neighbouring Countries for Real-world Use-cases
Alessandro Zavatta (QTI Quantum Telecommunications Italy)

Optical Fiber Backbones for Simultaneous Quantum Communication and Time / Frequency Distribution
Tara Liebisch (PTB Physikalisch-Technische Bundesanstalt)



Thursday, 25.01.2024 – QCI Days | Day 1

15:20-15:50

Panel Discussion: QKD Networks and Architecture

Moderation: Sebastian Ramacher (AIT Austrian Institute of Technology)

Vicente Martin (UPM Technical University of Madrid)
Christoph Striecks (AIT Austrian Institute of Technology)
Ludovic Perret (Sorbonne University)
Tara Liebisch (PTB Physikalisch-Technische Bundesanstalt)
Alessandro Zavatta (Quantum Telecommunications Italy)

15:50-16:00

Digital Europe Programme Pitches | DEP 2

Portugal – PTOCI (Catarina Bastos)
Ireland – IrelandQCI (Deirdre Kilbane)
Sweden – NOCIS (Vashali Adya)
Estonia – EstQCI (Ingrid Linnas)
Romania – RoNaQCI (Bogdan Ciobanu)
Malta – PRISM (Johann Briffa)

16:00-16:30

Coffee Break & Exhibition & Posters

16:30-16:40

Digital Europe Programme Pitches | DEP 2

France – FranceQCI (Julien Leger)
Belgium – Be-QCI (Giacomo Carrara)
Luxembourg – Lux4QCI (Jorge Luis González Rios)
The Netherlands – QCINed (Jesse Robbers)
Denmark – QCI.DK (Dev Null)
Poland – PIONIER-Q (Piotr Rydlichowski)

16:40-17:30

Use Cases and Deployments

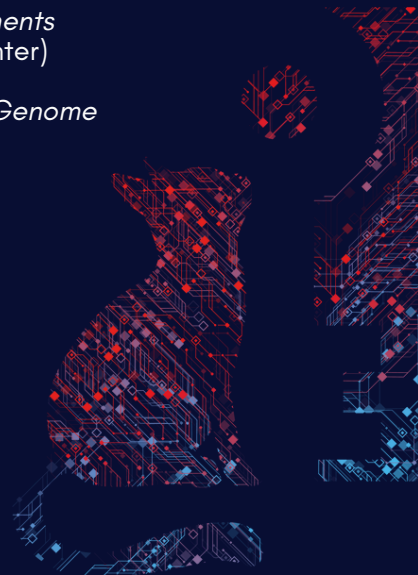
DISCRETION: an SDN enabled by QKD for military applications
Catarina Bastos (Deimos)

QKD for High Performance Computing and Datacenter Environments
Piotr Rydlichowski (Poznan Supercomputing and Networking Center)

Quantum Enabled Private Recognition of Composite Signals in Genome
Laura Ortiz (UPM Technical University of Madrid)

Deploying Quantum Networks at BT
Catherine White (BT Group)

Securing Boarder Gateway Protocol with QKD and PQC
Paul Spooren (HS Nordhausen)





Thursday, 25.01.2024 – QCI Days | Day 1

17:30-18:00

Panel Discussion: Use Cases and Deployments

Moderation: Natalia Burno (CNR - Consiglio Nazionale delle Ricerche)

Catarina Bastos (Deimos)
Piotr Rydlichowski (Poznan Supercomputing and Networking Center)
Laura Ortiz, (UPM Technical University of Madrid)
Catherine White (BT Group)
Paul Spooren (HS Nordhausen)

18:00-18:10

Digital Europe Programme Pitches | DEP 2

Czech Republic - CZQCI (Jan Bouda)
Croatia - CroQCI (Vlatka Marcan)
Greece - HellasQCI (Ilias Papastamatiou)
Italy - QUID (Alice Meda)
Austria - QCI-CAT (Sebastian Ramacher)

18:10-18:30

Quantum Raffle & Quantum Poem

18:30

Closing Day 1 & Reception





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Friday, 26.01.2024 – QCI Days | Day 2

Moderation: Stefan Schauer (AIT Austrian Institute of Technology)

09:00-09:30

Registration & Coffee

09:30-10:30

Satellite and Free-Space QKD

History of Quantum Communication in Space
Paolo Villoresi (University of Padua)

Feasibility of Satellite QKD
Deirdre Kilbane (Walton Institute)

Ground Stations and Satellite Payloads
Thomas Scheidl (qtlabs)

OGS Integration in the HellasQCI Terrestrial QKD Segment in the Framework of EUROQCI
George Kanellos (University of Athens)

EAGLE-1 – State of Play
Thomas Bäumer (SES Techcom)

Free-Space QKD over Horizontal Links
Francesco Vedovato (University of Padua)

10:30-11:00

Panel Discussion: Satellite and Free-Space QKD

Moderation: Marie-Christine Slater (AIT Austrian Institute of Technology)

George Kanellos (University of Athens)
Deirdre Kilbane (Walton Institute)
Francesco Vedovato (University of Padua)
Thomas Scheidl (qtlabs)
Paolo Villoresi (University of Padua)
Thomas Bäumer (SES Techcom)

11:00-11:30

Coffee Break & Exhibition & Posters



Friday, 26.01.2024 – QCI Days | Day 2

11:30-12:20

Certification: From Protection Profiles to Accredited QKD

Technical Report on Implementation Attacks against QKD Systems
Tobias Hemmert (BSI Bundesamt für Sicherheit in der Informationstechnik)

Roadmap for Certification
Guntram Wicke (Deutsche Telekom)

Certification in Practice
Hannes Gross (SGS)

The impact of Quantum Technologies for the Digital Sovereignty of EU
António Gameiro Marques (NSA Portugal)

Nostradamus – EuroQCI Testing and Evaluation Infrastructure
Felix Wissel (Deutsche Telekom)

12:20-12:50

Panel Discussion: Certification

Moderation: Martin Stierle (AIT Austrian Institute of Technology)

Tobias Hemmert (BSI Bundesamt für Sicherheit in der Informationstechnik)
Guntram Wicke (Deutsche Telekom)
Hannes Gross (SGS)
António Gameiro Marques (NSA Portugal)
Werner Strasser (fragmentiX Storage Solutions)
Felix Wissel (Deutsche Telekom)

12:50-13:20

Impact of Quantum Technologies on Society

Cybersecurity meets Biosecurity
Kurt Zatloukal (Medical University of Graz)

Education for Quantum Engineers
Mira Maiwöger (University of Applied Sciences, FH Technikum Wien)

Quantum Technologies – A Risk Assessment Perspective
Stefan Schauer and Martin Latzenhofer (AIT Austrian Institute of Technology)

13:20-13:30

Closing QCI Days Vienna 2024

13:30-14:30

Lunch & Exhibition & Posters

14:30-16:00

PETRUS Open Forum

Exclusively for DEP 1 & DEP 2 Projects

Funded by the European Union and the National Foundation for Research, Technology and Development under the Project Number: 101091642



Organised by the consortium of the national EuroQCI project "QCI-CAT"

CONFIRMED EXHIBITORS & PROJECT PRESENTATIONS & POSTERS

Confirmed projects from the Digital Europe Programme DEP 1

MDI-QUEEN

SECRET

QKISS

eCausis

EQUO

QUARTER

Confirmed projects from the Digital Europe Programme DEP 2

Be-QCI (Belgium)

EstQCI (Estonia)

Lux4QCI (Luxembourg)

CroQCI (Croatia)

FranceQCI (France)

NQCIS (Sweden)

CZQCI (Czech Republic)

IrelandQCI (Ireland)

PIONIER-Q (Poland)

PTQCI (Portugal)

QCI-CAT (Austria)

QUID (Italy)

PRISM (Malta)

QCI.DK (Denmark)

HellasQCI (Greece)

QCINed (The Netherlands)

RoNaQCI (Romania)

QCIHungary (Hungary)

EuroQCI-SPAIN (Spain)

Confirmed projects from the Quantum Flagship

QSNP

Qu-Test

Qu-Pilot

QUCATS

QIA

Confirmed Exhibitors in the Showroom & Supplier Pitches

QuIC

ThinkQuantum

KETS Quantum

Q-Bird

ID Quantique

fragmentiX

PETRUS

Toshiba Europe

qtlabs

Quantum Industries

QTI

KEEQuant

QND

Single Quantum

QuantLR

Quantum Optics Jena

X-Net

LuxQuanta

Quside

QoolNET

Mercury

CANCOM

dacoso

Meet the Coordination and Support Action (DEP 3) project "PETRUS" and join the Open Forum on the third day.