



Dear ,

Before we all take a well-earned rest over the festive period, we have a final newsletter of 2023 for you.

In this edition we reflect on two of the year's successful events, we draw your attention to the 5th session of 'Quantum Technology training for policymakers', taking place **today**, and the opportunity to become part of the Quantum Flagship booth at Mobile World Congress 2024.

Additionally, we share exciting news from Quantum Flagship projects, updates on the Quantum Declaration and a new EIC call for quantum components.

**Finally, we wish you a relaxing holiday season and a successful and healthy 2024!**

If you would like to inform the quantum community on any quantum technology (QT) activities or events within your national or regional community, or provide feedback to the QT newsletter, please get in touch at [newsletter@qt.eu](mailto:newsletter@qt.eu).

Best regards,  
The Quantum Flagship Coordination Team

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## News from the Quantum Flagship

### Quantum Flagship event news

## Quantum Technology training for policymakers

• ONLINE TRAINING  
**QUANTUM TECHNOLOGY**  
 for policymakers  
 Topic:  
 Use cases: Communication  
 Speakers  
**DR. ELENI DIAMANTI**  
 CNRS Research Director at Sorbonne University, France  
**VANESA DIAZ**  
 CEO of LuxQuanta, Spain  
**TOMMASO OCCHIPINTI**  
 Co-Founder and CEO at QTI SRL,  
 Founder & CEO at Oengineering SRL, Italy  
 14 Dec 2023  
 11:00-12:00 CEST

The 5th session of the online training series is dedicated to quantum communication and will take place **today, 14 December 2023** at **11:00 CET**.

Listen to inspiring presentations about use cases in communication by Dr. Eleni Diamanti, CNRS Research Director at Sorbonne University, about quantum communication on earth and in space by Tommaso Occhipinti, Co-Founder and CEO at QTI SRL, and on quantum key distribution with continuous variable technology (CV-QKD) by Vanesa Diaz, CEO at LuxQuanta.

[REGISTER NOW](#)

### Quantum Flagship event news

## Call to participate in Mobile World Congress 2024



The Quantum Flagship will again be at Mobile World Congress 2024 (MWC) in **Barcelona** on **26 - 29 February 2024**. In 2023, MWC drew over 60,000 visitors from 160+ countries, eager to explore and invest in innovative technologies. The European Quantum Zone, led by the Quantum Flagship, showcased 8 companies and 3 projects, and hosted Quantum Coffee Talks, a platform to present products and engage with the audience, attracting visitors like EU Commissioner Thierry Breton.

This is a call to the EU quantum community, especially companies and quantum-related FPAs in mobile ecosystem areas. If you'd like to join the Quantum Flagship booth and have a demonstrator in communications, sensing, computing, or AI, please contact us at [info@qt.eu](mailto:info@qt.eu) by **2 January 2024**. While the Quantum Flagship provides space and some MWC passes, please note that travel expenses are not covered, and participants share the exhibition costs.

[CONTACT US](#)

## Quantum Flagship event news

### Follow-up: Conference on Quantum Technologies in Europe



The Quantum Technologies in Europe Conference, held 22-23 November in Madrid, was a resounding success, uniting over 350 individuals from research, industry, and policy institutions. Organised by QuantERA and the Quantum Flagship under the Spanish Presidency of the EU, the event featured inspiring presentations and insights from prominent figures in QT.

The two-day conference included lectures from representatives of the European Commission, Spanish ministries, and keynote speeches delivered by distinguished

scientists Prof. Juan Ignacio Cirac (Max Planck Institut für Quantenoptik), Prof. Serge Haroche (Nobel Prize Laureate in 2012), and Prof. Anton Zeilinger (Nobel Prize Laureate in 2022).

The recorded sessions can be found on the conference website.

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Quantum Flagship event news

## EQTC 2023: A great success



With over 650 guests, the European Quantum Technologies Conference (EQTC), Europe's quantum event of the year, took place in Hannover from 16 to 20 October 2023.

You can now watch the wrap-up movie of the event to get an impression of our inspiring event or just to remember the experiences shared and connections made.

We once again we express our gratitude to all who played a role: speakers, exhibitors, attendees, sponsors, and organisers!

[News from the European Commission](#)



## News from the European Commission

### Signing of Quantum Declaration

On 5 December 2023, in the presence of European Commissioner Thierry Breton, the Spanish EU Presidency issued a declaration aimed at enhancing collaboration among Member States and with the European Commission to develop a world-class QT ecosystem in Europe.

The declaration recognises the strategic importance of QT for the EU's scientific and industrial competitiveness, with the goal of making Europe the global leader in quantum excellence and innovation. Eleven Member States have already endorsed the declaration, committing to collaborative efforts in key areas such as coordinating research programs, accelerating the transition from laboratory to production, and building pan-European quantum infrastructures.

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## Funding for QT

### EIC Accelerator Challenge for quantum components

The European Innovation Council (EIC) has just announced its 2024 work programme, which includes an Accelerator Challenge on 'emerging quantum technology components' with a budget of up to €50 million. Specifically, it aims to "support the EU in leading the development of cutting-edge quantum computing/simulation, quantum sensing and quantum communications for real environment application."

Short applications can be submitted at any time, with cut-offs for full applications in March and October 2024. Online information days will be held on **15 & 16 January 2024**. You can find further details below, and stay updated on other QT funding calls via our [dedicated page](#).

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## News from Quantum Flagship projects

QIA project news

### Winner of the Quantum Internet Application Challenge 2023 awarded

The Quantum Internet Alliance (QIA) has concluded its first-ever Quantum Internet Application Challenge and selected *qperf* as the most impressive submission for this round.

*qperf* is a tool that measures fidelity, a key metric quantifying the accuracy and reliability of quantum information transfer. It was developed by Claudio Cicconetti, a computer science researcher at the Institute of Informatics and Telematics of the National Research Council (IIT-CNR) in Italy.

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QIA project news

### Register now: Pan-European Quantum Internet Hackathon 2024



# Pan-European Quantum Internet Hackathon 2024

15-16 February 2024

Delft, Dresden, Paris and Poznań

The Quantum Internet Alliance (QIA) is organising a Pan-European Quantum Internet Hackathon 2024, taking place in Delft, Dresden, Paris, and Poznań on **15 & 16 February 2024**.

This hackathon aims to pioneer applications that leverage quantum mechanics for communication and offers a sneak peek into the quantum internet.

Building on the success of our Pan-European Hackathons in 2019 and 2022, it is organised by the QIA Use Case Team in close collaboration with RIPE NCC, GEANT, and the Poznań Supercomputing and Networking Center.

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## PASQuanS2.1 project news

### Quantum tool opens door to large-scale entanglement phenomena

Researchers from the Quantum Flagship project **PASQuanS2.1** (Programmable atomic Large-Scale Quantum Simulation 2.1) have published exciting results in the journal *Nature*. The Innsbruck team lead by Peter Zoller has experimentally demonstrated an approach that can significantly speed up the characterisation of large-scale entanglement in quantum many-body systems.

Using an ion-trap quantum simulator with 51 particles, a real material could be imitated and studied in a laboratory environment. A level of control that is required to study quantum properties over such a large number of particles is possessed by only a handful of research teams globally, one of which is the experimental group led by Christian Roos and Rainer Blatt.

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Funded by the European  
Commission

## Responsibility

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