



Quantum Sweden Innovation Intelligence Digest (QSII) is a curated monthly newsletter with external quantum innovation business news from around the globe.



PsiQuantum and Mitsubishi UFJ Financial Group (MUFG) are partnering on an initiative called Qclimate, which will focus on using fault-tolerant quantum computing to address some of the most challenging computational problems to develop climate technologies, including smart windows, energy-efficient data storage, solar energy storage and solar cells.

[Read more here.](#)



On April 11, 2024, the European Commission published a Recommendation on Post-Quantum Cryptography to encourage Member States to develop and implement a harmonised approach as the EU transitions to post-quantum cryptography. This will help to ensure that the EU's digital infrastructures and services are secure in the next digital era.

[Read more here.](#)

Fujitsu has developed a novel technique on a quantum simulator that speeds up quantum circuit computation by 200 times. This new technology enables “simultaneous processing of a large number of repetitively executed quantum circuit computations distributed among multiple groups.”

[Read more here.](#)

A collaboration between Toshiba Europe Ltd. and Single Quantum B.V. has led to long-distance deployments of Quantum Key Distribution (QKD) technology, up to and beyond 300km. This is a substantial increase in range compared to previous transmission ranges and offers quantum secure keys that are immune to decryption by both high-performance conventional and quantum computers and is generated through quantum properties of light.

[Read more here.](#)

The UK's National Quantum Computing Center joins the IBM Quantum Network and as a part of the agreement is provided access to IBMs Quantum Computers, which will boost the UK's vision to solve some of the most complex and challenging problems facing society by harnessing the potential of quantum computing.

[Read more here.](#)

Read the third annual Quantum Technology Monitor report from McKinsey to understand the latest opportunities in quantum technology, that could be worth trillions of dollars within the next decade.

[Read more here.](#)

After more than 10 years based in Gothenburg, Sweden, QSIP partner, ConScience AB has expanded its operation to neighboring country Denmark and opened a subsidiary ConScience ApS. This expansion is led by executive direction Kristian Worziger N., who says, "I am thrilled to be charged with establishing ConScience's Danish subsidiary - where I actively can seek out and cultivate talent for our high-tech growth company." Situated in Copenhagen, ConScience has access to a strong research and start-up environment, which includes the Technical University of Denmark and the University of Copenhagen. [Read more here.](#)

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## QSIP – Empowering Sweden's Quantum Innovation Future

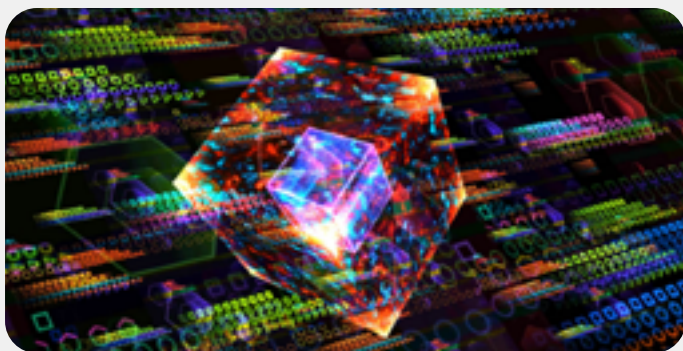
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Zurich Instruments, quantum control system provider, and QuantWare, supplier of superconducting quantum devices, have joined forces to provide out-of-the-box tuning of the full qubit readout chain, addressing challenges of high-fidelity qubit readout. This service will make quantum computing technology more accessible thus accelerating the progress towards practical quantum computing. [Read more here.](#)

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A partnership between "global interconnection and hyperscaler data centre giant Equinix" and Quside, Spanish entropy solutions producer, will work to protect customers from increasingly sophisticated cyber-attacks through the latest quantum random number generation technologies. [Read more here.](#)

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Reticulate Micro, Inc., a commercial and defense technology company and Quantropi, a Canadian cybersecurity company, have announced an exclusive partnership to jointly market their firms' video encoding and quantum security technologies to the defense and encoding markets. [Read more here.](#)

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HQS Quantum Simulations, a provider of quantum simulation software, has introduced HQStage, a powerful modular cloud-supported toolkit designed to meet the simulation needs of developers and researchers in quantum physics and chemistry. HQStage offers 10 powerful simulation modules, intuitive management tools and the flexibility to combine local and cloud computing. [Read more here.](#)

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The 2024 IBM Quantum Challenge is about Qiskit 1.0 and will showcase new features, while demonstrating the differences from previous versions. This annual coding challenge is an educational event focused on teaching the world how quantum computational scientists use Qiskit and will kick-off on June 5th and run until June 14th. [Read more here.](#)

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The European Commission has also launched a call for proposals for research and innovation in AI and quantum technologies as a part of the Horizon Europe 2023-2024 digital, industrial and space work programme. Of the €112 million, €40 million will go directly to boosting research into quantum technologies. [Read more here.](#)

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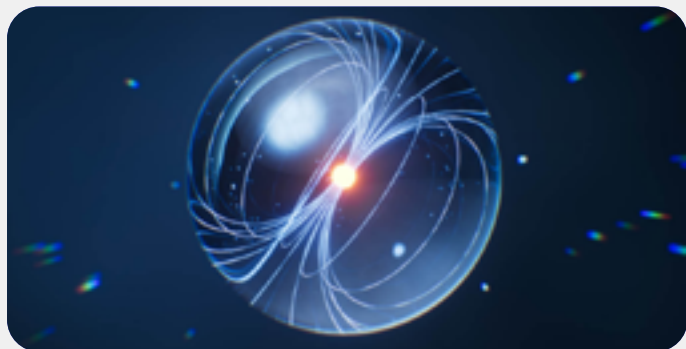
Danish company, Novo Holdings, plans to invest €188 million over the next six years in the Danish quantum startup ecosystem. Parent company to Novo Nordisk the creator of 'miracle drug' Ozempic, Novo Holdings already invests heavily in building health-tech startups. However, with Denmark home to the highest number master students enrolled in quantum related studies per capita, it is not surprising that this investment company would set their sights on quantum. [Read more here.](#)

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As quantum computing gains momentum, the month of April 2024, demonstrated this force with the number of partnerships announced, both public and private. There were also several key takeaways, including: diverse applications, practical and tactical, modular approaches, etc. Read the full article for partnerships and full list of key take aways.

[Read more here.](#)

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Aquark Technologies has won a £3.4 million contract from Innovate UK to develop its high-performance cold atom clock, AQlock. Cold atom clocks are extremely precise tools that measure time by using atoms that have been cooled to nearly absolute zero. Aquark uses a unique laser cooling method in AQlock, known as super molasses, which makes the clock more portable and robust than other cold atom clocks and easier to produce commercially.

[Read more here.](#)

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