



Press release

Atos, CSC and IQM partner to accelerate the commercialization of European quantum technologies

Paris, 18 June 2020 – [Atos](#), a global leader in digital transformation, [CSC – IT Center for Science](#) and [IQM](#), the European leader in superconducting quantum computers, announce the formation of a partnership to create the first comprehensive 100% European quantum ecosystem which includes a simulator, a universal programming environment and quantum hardware.

As part of this initiative, IQM will use the [Atos Quantum Learning Machine \(QLM\)](#) to offer a complete programming, compilation and execution environment for its quantum processor. IQM will also take advantage of Atos QLM's advanced hardware characterization tools, including gate tomography and numerical noise modeling. In addition to expertise, [CSC will contribute an Atos QLM to the initiative](#). Phase one of the project, which consists of connecting the Atos QLM to IQM's quantum accelerator, is already underway at CSC's facility in Espoo, Finland.

Within the last decade, quantum computing has evolved from experimental curiosity to tangible technology. By enabling engineers and students to develop and experiment with quantum software, Atos QLM contributed to the surge in early adoption and the identification of hundreds of early applications. Combined with IQM's hardware systems and CSC's deep understanding of successful quantum technology projects, the partnership will bring the market a step closer to developing viable, practical and cost-effective solutions for specialized quantum applications in a variety of sectors. In the future, quantum computing is expected to provide an exceptional boost to research efforts within fields such as artificial intelligence, molecular design of pharmaceuticals and green catalysts, cyber security, optimization solutions for smart energy management and financial technologies.

"We think that the fastest way to make quantum computing a commercial reality is through collaborations across the ecosystem," says **Dr. Jan Goetz, IQM's CEO**.

"That's why we're excited to partner with trailblazers like CSC and Atos. With IQM they get a dynamic young hardware partner that's relentlessly pushing the limits of quantum physics to produce Co-Design Quantum Computers for specific applications."

"As quantum technologies mature in the next few years, the value and opportunities for users will increase. Conscious of what is at stake, governments across the globe are funding multiple research programs but the quantum revolution also requires for technology leaders, academic and startups to cooperate in order to turn promises into a reality. Together with CSC and IQM, we will pave the way for the wide adoption of quantum technologies," explains **Cyril Allouche, VP, Head of the Quantum R&D Program at Atos.**

"IQM, Atos and CSC share the common ambition to create added value based on the power of quantum computing. We are excited to be part of this new partnership and look forward to the new understanding that will spring from this work. As an outcome, we wish to catalyze the study of quantum algorithms by Finnish researchers," says **Dr. Pekka Manninen, Program Director at CSC.**

About Atos

Atos is a global leader in digital transformation with 110,000 employees in 73 countries and annual revenue of € 12 billion. European number one in Cloud, Cybersecurity and High-Performance Computing, the Group provides end-to-end Orchestrated Hybrid Cloud, Big Data, Business Applications and Digital Workplace solutions. The Group is the Worldwide Information Technology Partner for the Olympic & Paralympic Games and operates under the brands Atos, Atos|Syntel, and Unify. Atos is a SE (Societas Europaea), listed on the CAC40 Paris stock index.

The purpose of Atos is to help design the future of the information space. Its expertise and services support the development of knowledge, education and research in a multicultural approach and contribute to the development of scientific and technological excellence. Across the world, the Group enables its customers and employees, and members of societies at large to live, work and develop sustainably, in a safe and secure information space.

About CSC

CSC is a Finnish center of expertise in ICT that provides world-class services for research, education, culture, public administration and enterprises, to help them thrive and benefit society at large. www.csc.fi

About IQM

IQM is the European leader in superconducting quantum computers. It follows an innovative Co-Design strategy to deliver quantum advantage to its clients, based on application specific processors, using novel chip architectures and ultrafast quantum operations. IQM is ready to deliver quantum computers to scientific and industrial customers. www.meetiqm.com

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