

## Atos signs strategic partnership with Technical University of Denmark to deliver its latest Atos Quantum Learning Machine

**Paris, Copenhagen, September 13, 2018 – Atos, a global leader in digital transformation, today announces a new strategic partnership with the Technical University of Denmark (DTU) on quantum computing and learning.**

As part of this strategic partnership, the DTU will be the first university in Denmark to use the Atos Quantum Learning Machine, capable of developing up to 41 Qubits (quantum bits). The DTU is joining several other leading international institutes, such as [the US Department of Energy's Oak Ridge National Laboratory](#), the French University of Reims, and most recently [the University of Applied Sciences in Upper Austria](#).

The Atos Quantum Learning Machine will support professors and researchers at the DTU with the analysis and development of new algorithms, including for example in the development of new molecular structures. The researchers and students will now have the opportunity to work with the business community to develop and test tomorrow's quantum programs and algorithms which will be used to process large data volumes such as in Big Data, Internet of Things and Artificial Intelligence.

The Atos Quantum Learning Machine is the first industrialized and turnkey quantum system capable of simulating up to 41 Qubits and combines an ultra-compact system with a quantum software programming language based on the universal standard aQasm (Atos Quantum Assembly Language). Thanks to an in-memory based infrastructure the computing simulation capacity can be increased as needed at any stage.

*"The Atos Quantum Learning Machine will enable DTU to experiment with the quantum computers that will most likely be around within a few years. This will give us a broader perspective and context regarding quantum technology—everything from physical and material technology to how to program it,"* **says Anders Bjarklev, President at DTU.**

*"As part of the Eurotech Universities Alliance, DTU is a very important strategic partner for Atos in Denmark. We are very excited to be able to bring the Atos Quantum Learning Machine to the Nordics and to encourage an innovative approach to teaching with state-of-the-art know-how",* **says Harri Saikkonen, Managing Director Atos Nordics.**

The Atos Quantum Learning Machine is expected to be delivered in 2019 and used by the DTU in both current and future research and innovation projects.

In the coming years, quantum computing should be able to tackle the explosion of data brought about by Big Data and the Internet of Things. Thanks to its innovative targeted computing acceleration capabilities based in particular on the exascale class supercomputer BullSequana, quantum computing should also foster developments in deep learning, algorithms and Artificial Intelligence for domains as varied as pharmaceutical or new materials. To move forward on these issues, Atos plans to set up several partnerships with research centers and universities around the world.

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## About Atos

Atos is a global leader in digital transformation with approximately 100,000 employees in 73 countries and annual revenue of around € 12 billion. European number one in Big Data, Cybersecurity, High Performance Computing and Digital Workplace, the Group provides Cloud services, Infrastructure & Data Management, Business & Platform solutions, as well as transactional services through Worldline, the European leader in the payment industry. With its cutting-edge technologies, digital expertise and industry knowledge, Atos supports the digital transformation of its clients across various business sectors: Defense, Financial Services, Health, Manufacturing, Media, Energy & Utilities, Public sector, Retail, Telecommunications and Transportation. The Group is the Worldwide Information Technology Partner for the Olympic & Paralympic Games and operates under the brands Atos, Atos Consulting, Atos Worldgrid, Bull, Canopy, Unify and Worldline. Atos SE (Societas Europaea) is listed on the CAC40 Paris stock index.

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