Atos delivers world's highest-performing quantum simulator to multinational energy company Total

Paris, May 16, 2019 – **Atos, a global leader in digital transformation, today announced it has delivered its Atos Quantum Learning Machine, the world's highest-performing commercially available quantum simulator, to French multinational energy company Total. As part of an ambitious cross-functional research project, the Total group intends to use the Atos QLM to support all of its businesses.**

Combining a high-powered, ultra-compact machine with a universal programming language, the Atos Quantum Learning Machine enables researchers and engineers to develop and experiment with quantum software.

It simulates the laws of physics, which are at the very heart of quantum computing, to compute the exact execution of a quantum program with double-digit precision.

Quantum simulation will find concrete applications within the Total group such as molecular and materials chemistry, the optimization of energy networks, vehicle fleets or industrial tools and, in the longer term, seismic imaging and fluid mechanics.

"By gaining expertise in quantum computing with this solution from Atos - a recognized industry leader - we are once again demonstrating our pioneering spirit. We will develop a quantum approach to different research issues covering all our businesses to explore new ways of solving problems and improve performance and efficiency," said **Marie-Noëlle Semeria, R&D Director at Total**.

"Through our program focused on the future of quantum computing, Atos is working closely with researchers and engineers around the globe, such as Total, to support them with tools to drive significant technological advances," said **Sophie Proust, Atos CTO**. *"The Atos Quantum Learning Machine enables businesses such as Total to develop and experiment with quantum processes and delivers superior simulation capabilities to speed innovation."*

In November 2016, Atos launched an ambitious program to anticipate the future of quantum computing and to be prepared for the opportunities as well as the risks that come with it. As a result of this initiative, Atos was the first to successfully model quantum noise. To date, the company has installed Quantum Learning Machines in numerous countries including Austria, Denmark, France, Germany, the Netherlands, and the United States empowering major research programs in various sectors.

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The 4th Atos Technology Days are co-located with VivaTech, the world's rendezvous for start-ups and leaders to celebrate innovation, with over 100,000 attendees.

About Atos

Atos is a global leader in digital transformation with over 110,000 employees in 73 countries and annual revenue of over € 11 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 technology space. Its expertise and services support the development of knowledge, education as well as multicultural and pluralistic approaches to research that contribute to scientific and technological excellence. Across the world, the group enables its customers, employees and collaborators, and members of societies at large to live, work and develop sustainably and confidently in the information technology space.

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