

## The first European quantum computer in the cloud, developed by Quandela

Paris, 15 November 2022 – Quandela launches the first European online service giving access to its quantum computers assembled and hosted in its Massy premises. Scientists, industry players, and companies can thus access several photonic processors for calculations of up to 5 photonic qubits. Quandela is aiming for 12 qubits available online by the end of 2023, each additional photonic qubit doubling the computing power of the quantum computer.

As planned by Quandela a year ago, a new milestone has been reached in the medium-term development of a full-stack, fault tolerant photonic quantum computer. Users can now, using Quandela's Perceval software suite, develop and run algorithms on a real photonic quantum processor (QPU) in addition to the simulators already available, allowing to validate the first algorithms on a real architecture.

*« By making the first photonic quantum computer available to all users, Quandela has reached a real milestone in the development of fault tolerant photonic quantum computers. This is a further proof of the viability of our technology, which will continue to grow in the coming months. This new step consolidates the trust that industrial companies such as EDF and ONERA have shown in us through the partnerships established in recent weeks »* **says Valérian Giesz, co-founder and CEO of Quandela.**

This new online quantum computing service was used for the first time by researchers and students from all over Europe participating in a quantum hackathon organized by Quandela at the Sorbonne in early November. More than sixty participants were able to propose solutions to concrete use cases, proposed by industrial partners such as Thales, and ran them on photonic processors.

This first European offer joins those already proposed by some suppliers, notably American and Canadian, such as IBM, of "Quantum as a Service" allowing industrial players to discover and develop applications specific to their industry.

### **About Quandela**

Quandela, a leader in quantum photonics, is developing a complete optical quantum computer. Founded in 2017, the company raised its first round of funding in 2020, followed by a second round in 2021 of €15M from the deeptech investment fund Omnes, Fonds Innovation Défense and the quantum technology fund Quantonation, enabling it to considerably strengthen its R&D teams.

Quandela is a complete player in photonic quantum computing and currently employs more than forty doctors and engineers in algorithms, semiconductors, quantum optics, quantum information and computer science. In 2022, Quandela released its photonic computer programming and simulation software, Perceval, and signed a hosting partnership with OVHcloud to strengthen the user community. Today, the company offers a cybersecurity enhancement solution with a 2-qubit processor and will make its first 6-qubit NISQ quantum computer available in the cloud in the fall of 2022. Quandela also supports and advises companies and organizations, such as EDF, MBDA and ONERA, in the exploration and development of the first use cases. The new service is available at <https://cloud.quandela.com> - and Quandela is offering free trial access to the service until the end of the year.

### **PRESS CONTACT**

**Lucas RENNESSON** - Mascaret  
[lucas.rennesson@mascaret.eu](mailto:lucas.rennesson@mascaret.eu) - +33 6 30 76 97 61