



Press release

The Teratec Forum honours French and European technological excellence in quantum computing

Paris, 17 May 2022 - Where are we one year after the launch of the "National Quantum Plan", a public-private commitment of 1.8 billion euros over 5 years, whose objective is to put France at the top of the world rankings for quantum technologies that are destined to transform computing and industry? What are the French and European nuggets that could revolutionise our industries of tomorrow? The Teratec Forum, the European meeting place for digital technology experts, is organising its 17th edition on 14 and 15 June on the École Polytechnique campus and will take stock of this technology of the future. Alongside the American and Chinese giants, France and Europe can make a difference. The Teratec Forum will give the floor to 7 renowned players.

"Quantum computing is a strategic global issue for which Europe and France are in a position to compete with the biggest. On the occasion of our annual meeting, we wanted to give a voice to local players and to our European neighbours who all offer cutting-edge approaches. It is therefore a great source of pride to be able to bring together, over two days, high-flying players on subjects as strategic as quantum computing", says Daniel Verwaerde, President of Teratec.

The Teratec Forum dedicates a workshop to the subject of quantum computing

Led by Guillaume Colin de Verdière, International Expert in High Performance Computing, and Jean-Philippe Nominé, Fellow in High Performance Computing at the CEA, this workshop aimed to highlight 7 French and European digital quantum computing technologies. This workshop will be held on 15 June at the Teratec Forum.

4 French actors will be present for the occasion:



C12 Quantum Electronics combines the ease of manufacturing semiconductor devices with the purity of carbon nanotubes to build an ultra-coherent and scalable quantum computer.



ALICE & BOB

Alice & Bob is a French start-up that has taken a unique approach to developing a cat qubit and thereby dramatically reducing the number of qubits needed to implement quantum error correction.



Quandela is a disruptive quantum photonics start-up, specialising in the manufacture of single photon sources (quantum hardware) and also in the design of associated algorithms.



Founded in 2019, **Pasqal develops** quantum processors using laser-manipulated neutral atoms. The merger with Qu&CO, which specialises in the design of quantum algorithms, enables Pasqal to offer a complete hardware/software package in the fields of chemistry, aerospace and quantitative finance, among others.

But also European companies among which :

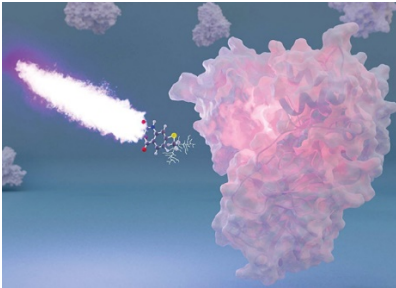


More information [Ter@tec \(teratec.eu\)](mailto:Ter@tec(teratec.eu))

Focus: Quantum computing in the health sector

In addition to the dedicated workshop, Qubit Pharmaceuticals will host a plenary session on a key topic: "*High resolution molecular simulations and drug discovery: from HPC to quantum computers*" on Tuesday 14 June 2022 at 10:50.

Jean-Philip Piquemal, CSO and co-founder of Qubit Pharmaceuticals, will give a comprehensive review and attempt to answer various questions:



- How high performance computing (HPC) can now dramatically reduce solution time for in silico drug discovery and how it now provides access to very high resolution simulations?
- What are the results obtained with the optimised multi-GPU platform on the subject of research into effective antivirals against COVID-19?
- How can such approaches be implemented on HPC supercomputers or their counterparts in the high-performance cloud?
- And finally, what are the prospects for the use of quantum computing in the pharmaceutical industry?

About Teratec :

Teratec is a European competence centre for high-performance digital simulation, bringing together more than ninety companies, research laboratories and universities. It was created on the initiative of major industrialists with the aim of bringing together all industrial and academic players, suppliers and users, providing access to the most powerful systems, and promoting and increasing the attractiveness of the field by encouraging economic development. <https://teratec.eu>

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