



Press release

The Teratec Forum closes its 17th edition

Environmental issues are entering the world of HPC

Ecole Polytechnique, Palaiseau, France - The Teratec Forum, the European meeting place for experts in high-power digital technologies, has concluded its 17th edition. For two days, on the verdant campus of the École Polytechnique, the Teratec Forum was the point of convergence for main experts in Simulation, HPC/HPDA, Artificial Intelligence and Quantum Computing, as well as specialists from the various user domains (industry, health...). Eagerly awaited after two digital editions, this major European meeting provided an opportunity to share the vision and developments of the technology and the market, as well as bringing again together manufacturers, users, suppliers, researchers and specialists to discuss high-power digital issues. And the situation is clear: digital technology accelerates constantly. This acceleration, which underpins the digital transformation of companies and enforces new rules on the world of high performance computing and simulation, goes with the swift emergence of environmental issues in its landscape.

Convergence of technologies, applications of the future, launch of the CC-FR, announcement of the Hackathon and awarding of trophies... A look at the highlights.

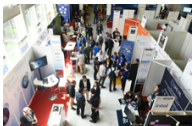
"After two virtual editions, the Teratec Forum 2022 was marked by the presence of new players, startups and large groups, as a strong sign of the acceleration of uses for the entire digital community, and the Teratec ecosystem! Our top-level speakers were unanimous in emphasizing energy constraints and environmental requirements now being the two mainstays of the HPC sector to be counted on as of now. The future of the sector ought to be carbon neutral and the players must take into account the importance of the environment as highlighted during the forum", explains Daniel Verwaerde, President of Teratec.

Highlights of the 17th Teratec Forum

A growing high-power digital ecosystem

The high-power digital ecosystem continues to develop. The 2022 edition is indeed marked by the arrival and confidence of new, much heterogeneous players (startups, large groups, specialists, etc.), who have come to enrich the event. Speakers from the world of health, for example, shared applications in neuroscience and cancerology, with ambitious perspectives that could revolutionize screening and treatment.

Rich and forward-looking content to share the vision of leading players



In addition to the exhibition which brought together the main players in the digital sector with more than 60 companies, the Forum was punctuated **by:**

Plenary sessions

Actors and stakeholders of the sector can share their vision on challenges and priorities thereto. This year's event featured Thales, HPE, Sipearl, GraphCore, Safran, OVH, Dassault Systèmes, Qubit Pharmaceuticals and 2CRSI, all of whom share the importance of taking the environment factor into account.



Many topics were discussed:

- Technological challenges and the diversity of uses of high performance computer simulation

- and data driven learning (DL)
- Cloud and sovereignty
- Simulation and data
- Digital twins
- Etc.

Workshops:

This year's focus was on key subjects of concern that have a concrete impact on companies: environmental impact, technological changes, mutation of professions, Green IT, quantum and digital sovereignty, applications of the future, e-health, artificial intelligence, etc.

"This edition was also marked by its prospective approach. New technologies and the associated new uses will have a strong impact on our activities and structure the economy of tomorrow. We were able to discuss key subjects: Metaverse, avatars, human digital twins. These are subjects that will set the pace for the next decade," continued Daniel Verwaerde, President of Teratec.

Launch of the HPC, HPDA and AI Competence Centre: a unique initiative in France



Teratec took advantage of its annual Forum to officially launch the "CC-FR" **Marketplace**, the French HPC, HPDA and AI Competence Centre created by EuroHPC. The aim of the CC-FR is to facilitate access and provide all support required for users of EuroHPC supercomputers. In order to connect all French stakeholders, service providers and users of their machines, the HPC Competence Centre marketplace has been assigned 5 objectives:

- federate academic and industrial players,
- inform and train on HPC, HPDA and AI technologies,
- find services and offers of support for use,
- find service offers and training,
- list events and job offers.

Launch of the HPC Hackathon

The 17th edition of the Forum also launched the HPC Hackathon, which is aimed at students at Master level. The calendar foresees the launch of registrations in September, and the Hackathon itself will take place from 28 November 2022 to 8 December 2022. The date is set!

Innovation at the heart of the 7th Simulation Awards and technologies 2022

The 7^{ème} Trophées de la Simulation et des technologies 2022, organized with Usine Digitale/IT rewarded innovative projects or companies that have carried out a remarkable operation in the field of digital simulation, high performance computing, Big Data or AI, alone or in co-design. The winners are:

- **The Startup Trophy:** Sipearl for its "RHEA" project
- **The Innovation Award:** CERFACS-SAFRAN AIRCRAFT ENGINES for their project Numerical study by "Particle-In-Cell" method of Hall effect engine for space propulsion using unstructured meshes
- **The Co-design Award:** IRT System X for its work with RTE on the "HSA Hybridation Simulation Learning" project
- **The Public's Grand Prize:** Altrans Energies for the "Translocator" project



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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