



EuroQCS-France

Paving the way to a federated European HPC-QCS infrastructure



HQI: FRANCE HYBRID HPC QUANTUM INITIATIVE

A scalable and open platform

Academic and Industrial research program

Pilot design and implementation



Applications 🏟

Exploration

(HPC @S)



Setting up an HQI platform end-user highlevel support team



Development of **USE**

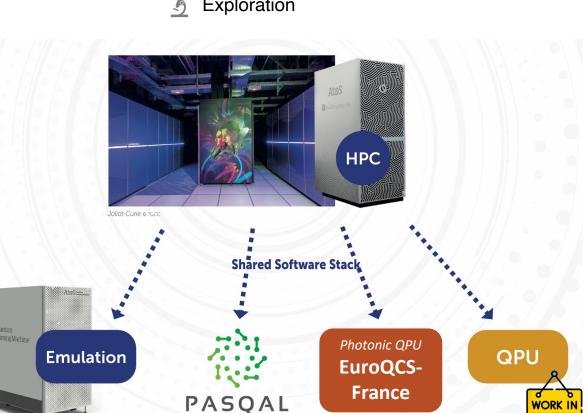
cases through national and international extensions of the Quantum Pack initiative



Creation of a network of excellence centers:

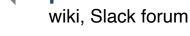








Community platforms - websites,



platform

Choice of a

sovereign Cloud

Services Provider

to provide access to the



Organization of dissemination events



Development of **International** relationships



EUROQCS – BUILT ON A COMMON VISION

EuroQCS – Built on a common vision



Based on the positioning paper "<u>European Quantum Computing & Simulation Infrastructure</u>" promoted by the Quantum Flagship.

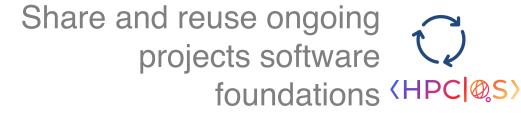
Expose all European quantum technologies to European users within a federated Cloud-based hybrid HPC-QC infrastructure

Hardware complementarity





Share common use cases





Set up a distributed HPC-QCS High-Level Support Team

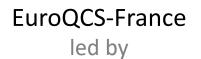


EUROQCS – FOUNDATIONS FOR A NEW EUROPEAN COLLABORATION ON HPC-QCS



Based on the positioning paper "<u>European Quantum Computing & Simulation Infrastructure</u>" promoted by the Quantum Flagship.

Expose all European quantum technologies to European users within a federated Cloud-based hybrid HPC-QC infrastructure







EuroQCS-Spain led by



EuroQCS-Italy led by



(HPC|@S>

Discussed with

EuroQCS-Poland & Lumi-Q

led by



VSB TECHNICAL | IT4INNOVATIONS | NATIONAL SUPERCOMPUT | CENTER

Open to welcome any other European initiative



EUROQCS-FRANCE – HQI'S 2ND QUANTUM DEVICE!

Hosting a European photonic quantum computing device

Initiated by 5 partners, for 4 years





Participating in a federated European infrastructure

Targeting a photonic quantum device





Exposing complementary hardware

Coupled with Joliot-Curie's AMD extension





Sharing common use cases

Hosted at TGCC





Setting up a distributed HPC-QCS High-Level Support Team

HPC-QCS integration relying on HPCQS' initial work















@HQI_France



THANK YOU

For more information on the HQI initiative, please contact:

Sabine MEHR
Chief Quantum Projects Officer
sabine.mehr@genci.fr
+33 (6) 79 81 21 15