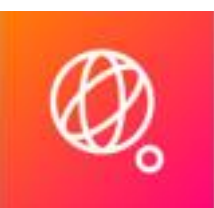




QUANTUM
FLAGSHIP



THE QUANTUM FLAGSHIP AT A GLANCE



October 2018



2000+
experts



10 years



1 billion €

2018-2021
Ramp-up phase

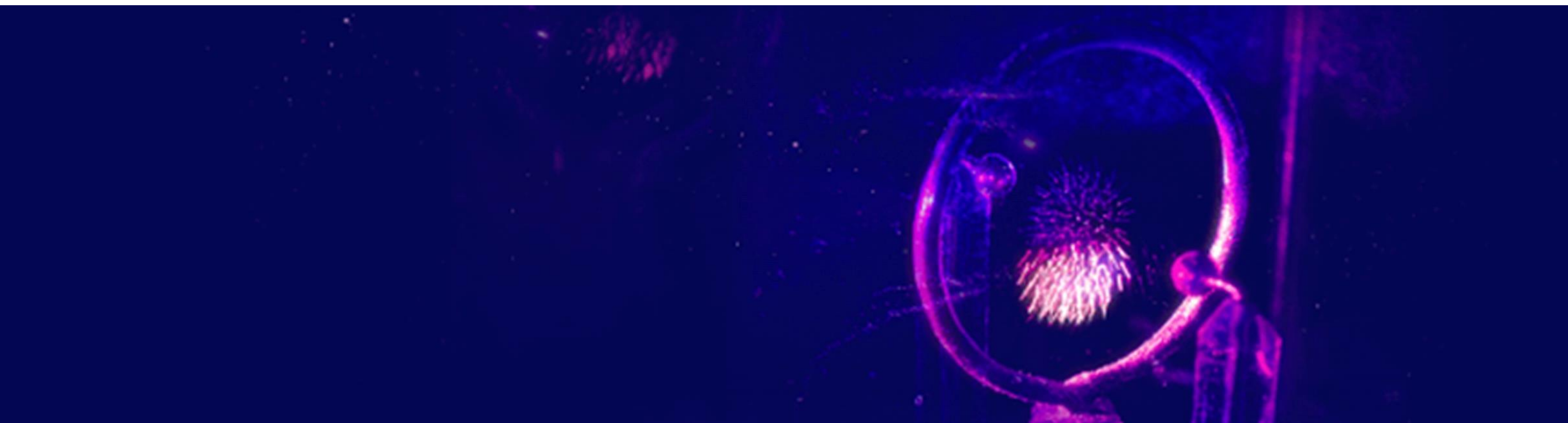
152 million €



141 proposals



20 projects



APPLICATION PILLARS

4 projects

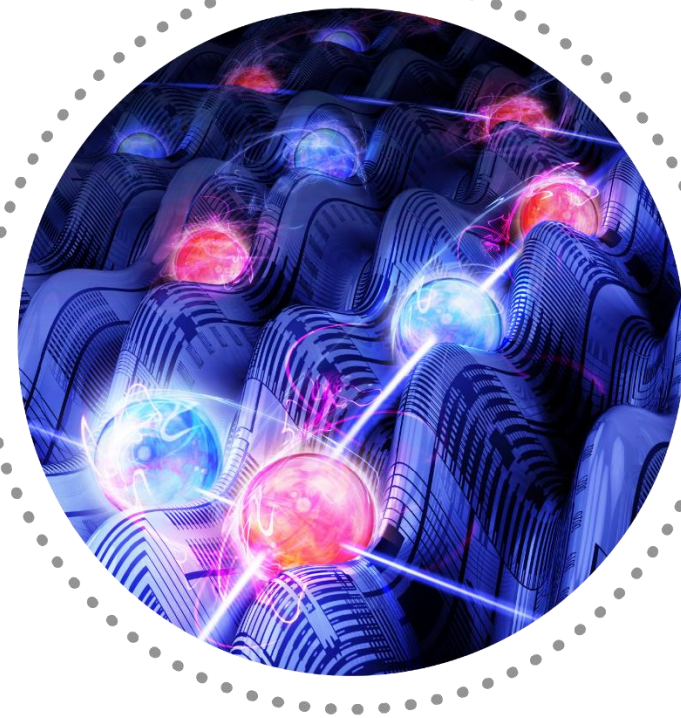


For a Secure Digital Society and a Quantum-enabled Internet

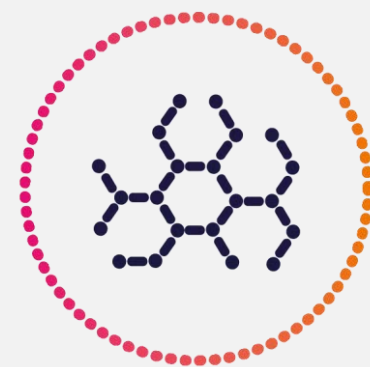


Quantum Internet - secure communication and applications

2 projects

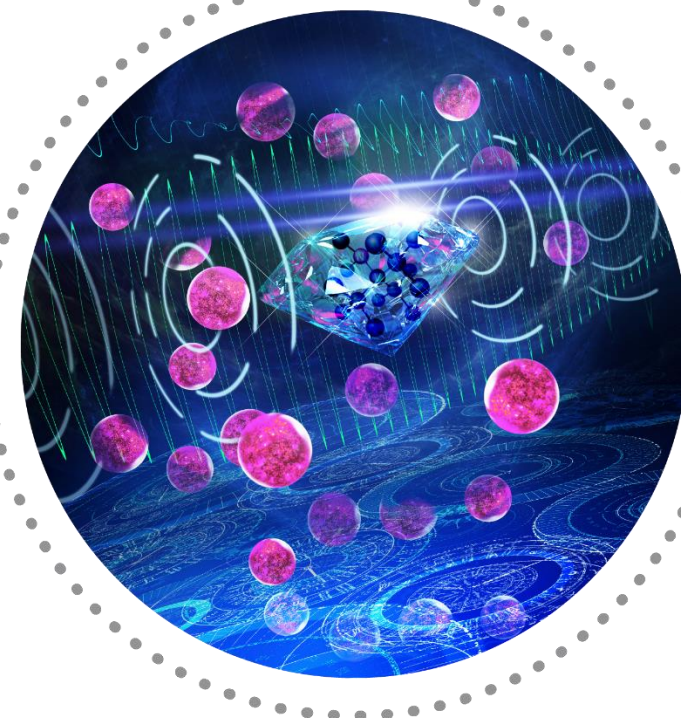


Simulating Complex Systems for Advanced Design and Development



By 2021 quantum simulators 20x more precise

4 projects

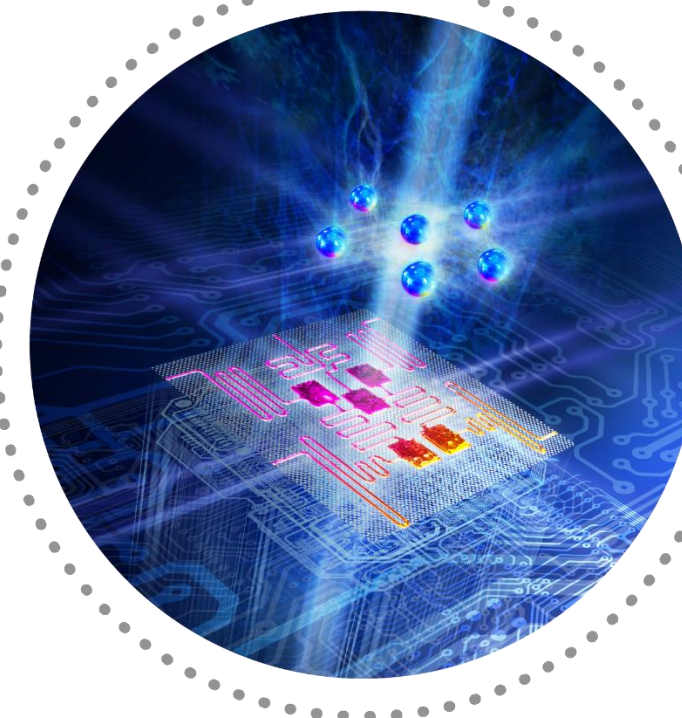


Bringing Accuracy And Performance To Unprecedented Levels



By 2021, sensors with resolution 1000x better

2 projects

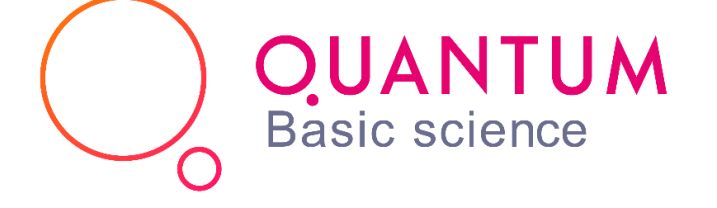
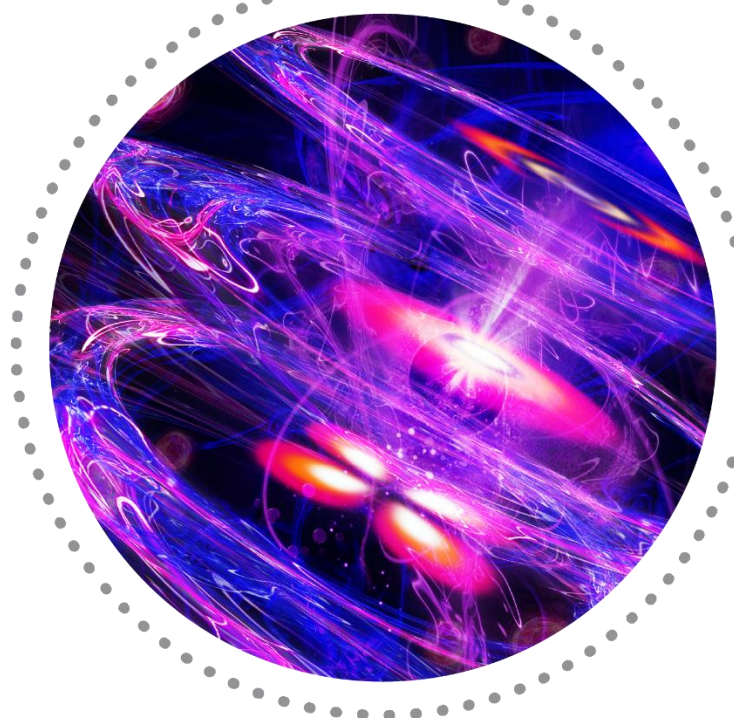


Computing Power To Overcome Currently Unsolvble Problems



By 2021, quantum computers of 50-100 qubits demonstrating first quantum applications

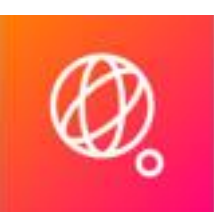
7 projects



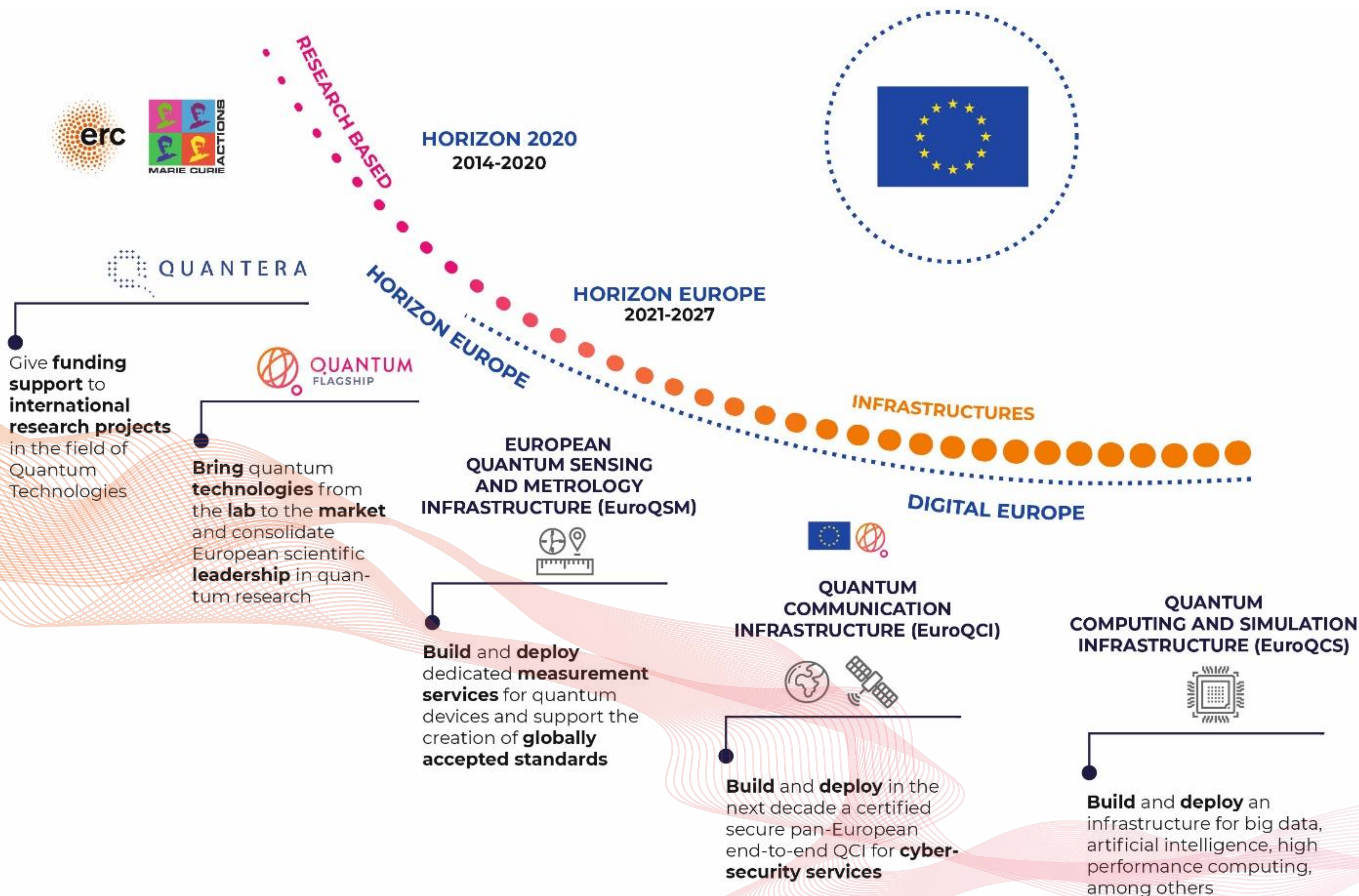
Addressing Foundational Challenges For Development Of Quantum Technologies

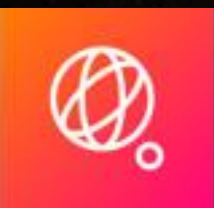


Discover & understand new fundamental quantum principles



FROM VISION TO REALITY – THE EU'S COMMITMENT





QUANTUM COMMUNICATION INFRASTRUCTURE



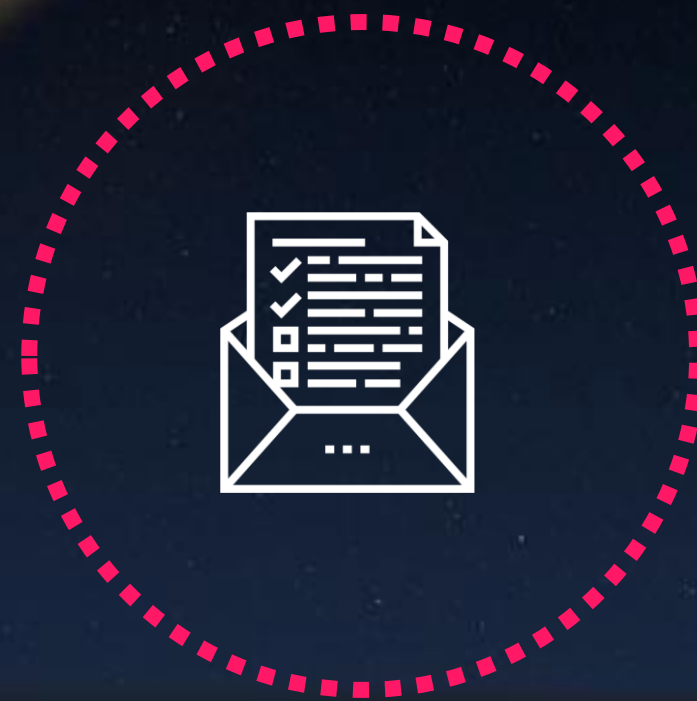
Integrate quantum cryptography
into critical communication systems



Combine terrestrial and satellite
components for wide coverage



Protection of data networks, clock
synchronization,
e-voting,...



Backbone infrastructure
for the quantum internet



QUANTUM COMPUTATION & SIMULATION INFRASTRUCTURE

