Global Research and Development Center for Business by Quantum-AI Technology

G-QuAT

- **Founded on July 27, 2023** -G-QuAT, a Japanese government initiative for quantum technology
- Serve as **a hub** for a **global quantum business ecosystem**
- **Cutting-edge quantum technologies** from fundamental research to practical deployment
- **Establishing key research infrastructure** through strategic global partnerships

R&D to scale quantum computers (QCs), use-case development, supply chain advancement, IP & standardization efforts, and talent cultivation—to foster a global business ecosystem.

ABCI-Q   Quantum- Classical Hybrid Computing Infrastructure

Superconducting QC
Japan's first commercial quantum system

Neutral Atom QC
The world's most advanced platform

GPU Supercomputer
The world's first GPU-Quantum platform for industry & academia
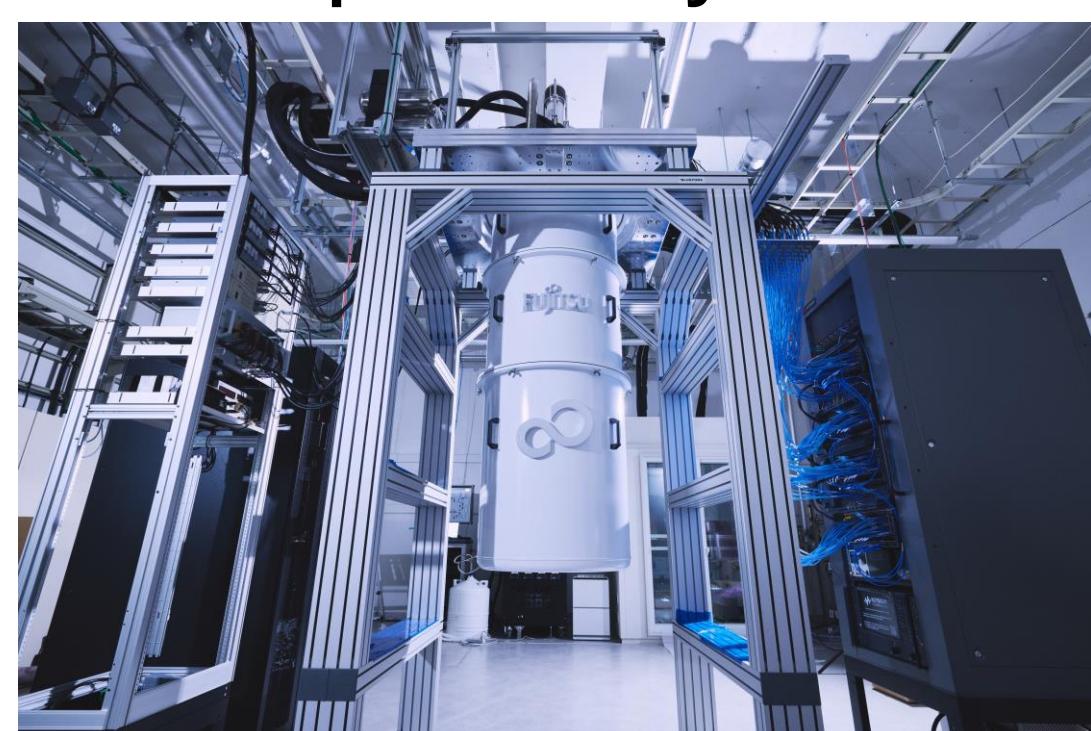
- Quantum + GPU, fused by low-latency network
- Pioneering real applications in materials, finance, drug discovery
- The International Users Service to launch **FY2026**
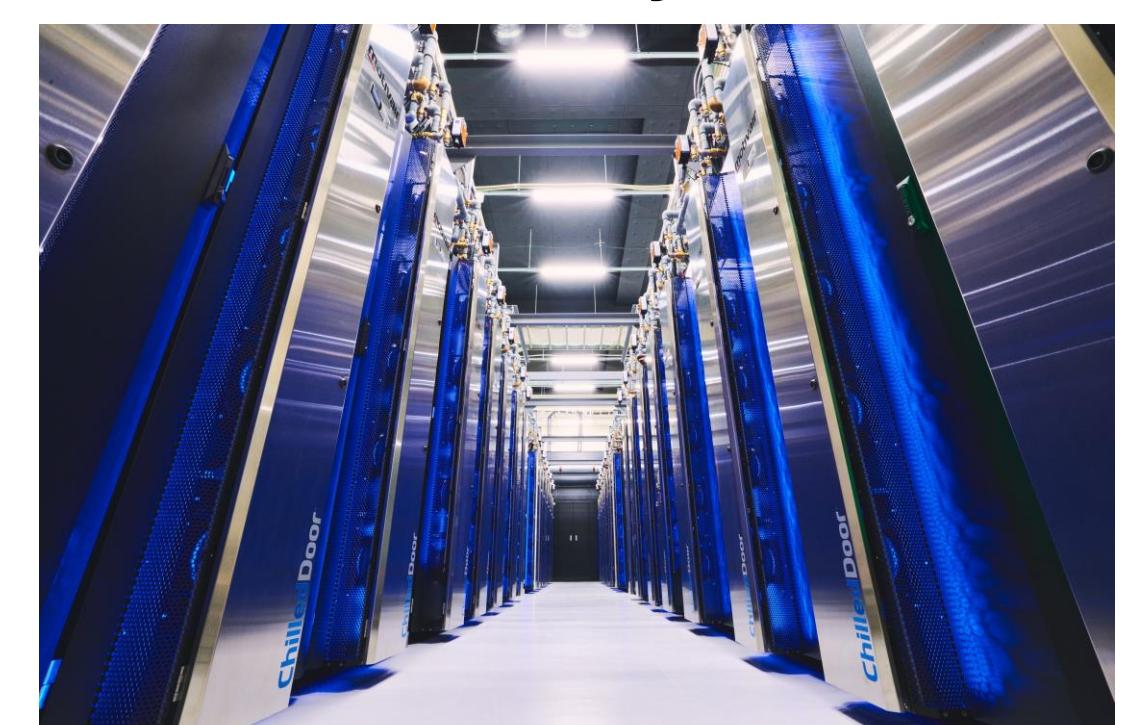
System H (GPU Supercomputer)
2,020 GPUs , **48,480** CPU cores
650+ TiB Memory, **3,800+** TB NVMe SSD

× 505

GPU	NVIDIA H100 SXM5 (80GB)	x 4
CPU	Intel Xeon Platinum 8558 (2.1GHz/48cores) x 2	
Memory	1024 GiB	
Local Storage	Micron 7450 SSD (NVMe) 3.84TB	x 2
Interconnect	InfiniBand NDR (400 Gbps)	x 2

Shape the FUTURE of Quantum Computing

USER One-Stop Access
- Remote access to diverse quantum cloud services
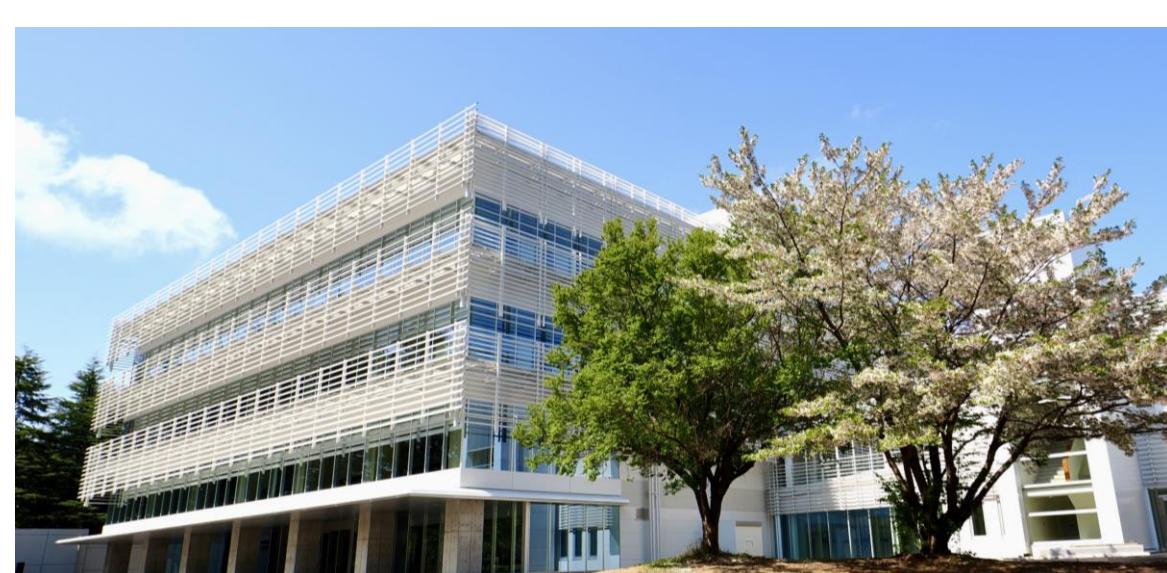
G-QuAT ABCI-Q GPU-HPC (2.1 EFLOPS)
- Gateway to QCs (Neutral Atom QC, Superconducting QC -Installed!)
- Optical QC Coming in 2026
- Software / Middleware Standardization
- Ising Machine, AI, Classical Solvers, etc.
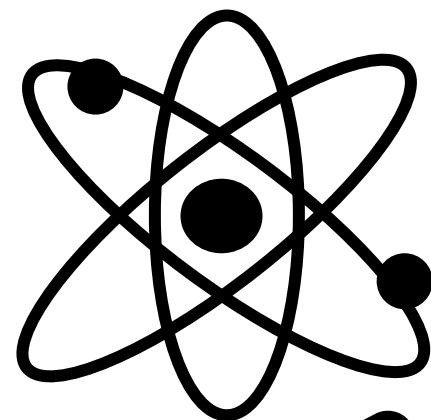
Comprehensive Industrial Support
- Accelerate development.
- Reduce cost and risk.
- Strengthen competitiveness.
- Ensure secure, reliable operation.
- Access critical technical resources anytime.

G-QuAT

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AIST
Create the Future, Collaborate Together