Company Overview



The Leader in Cold Atom Quantum Technology

Hilbert

QRaaS

CAT

Quantum Computing

Quantum Research as a Service

Cold Atom Tech



130+ Employees

Mostly PhDs, Engineers and Scientists



300+

Years of Quantum **Experience**



49 Patents

16 Granted,

23 Pending, and

10 Exclusive Licenses



2007

Founded



Boulder, CO

Headquarters with Offices in Madison, WI and Oxford, UK



\$60M+

3rd Party

Awarded Contracts

We leverage our leadership in Quantum Technology to deliver world-leading quantum devices and machines

Colin Fitzgerald, Product Manager EPIC Online Quantum Technology Meeting on Atomic Clocks and Network Synchronization 06 October 2021



Product Families



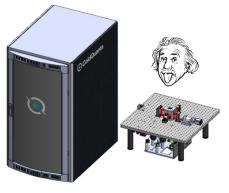




COLD ATOM SOURCES



MAGNETO-OPTICAL TRAPS



ALBERT:
QUANTUM MATTER MACHINE



TRAPPED ION PACKAGES



ATOMIC CLOCKS Taking Pre-orders

Colin Fitzgerald, Product Manager

EPIC Online Quantum Technology Meeting on
Atomic Clocks and Network Synchronization
06 October 2021



Clock Development

R&D supported by 4 government programs

CURRENT STATE-OF-ART



5071A Cesium Clock 21" x 17" x 5", 66 lbs Warm-Up: 30 min Instability $\sim 2 \times 10^{-11}/\tau^{1/2}$



Hydrogen Maser 24" x 31" x 36", 540 lbs Warm-Up: 30 Days Instability $\sim 8 \times 10^{-14}/\tau^{1/2}$



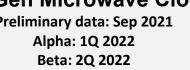
COLDQUANTA HIGH PERFORMANCE CLOCKS



1st Gen Microwave Clock

Preliminary data: Sep 2021 Alpha: 1Q 2022 Beta: 2Q 2022 18" x 18" x 2", 15 lbs

Warm-Up: 3 min



3x instability improvement over Cs



1st Gen Optical Clock

Preliminary data: 4Q 2022 Alpha: 1Q 2023 Beta: 2Q 2023 18" x 18" x 7", 50 lbs

Warm-Up: 5 min

Instability within 10x of H maser



2nd Gen Microwave Clock

5" x 6" x 7.2", 5 lbs Warm-Up: 1 min

5x instability improvement over Cs



2nd Gen Optical Clock

8" x 8" x 15", 20 lbs Warm-Up: 2 min

Instability on par with active H maser

Colin Fitzgerald, Product Manager EPIC Online Quantum Technology Meeting on Atomic Clocks and Network Synchronization 06 October 2021



What we offer / What we are looking for...

What we offer

- Broad portfolio of quantum devices and machines
- World class team of scientists and engineers
- Precision manufacturing
- Expertise in RF sensing, gravimeters, accelerometers, quantum memory, and timing

What are looking for

- Partnerships
- Understand the needs of system integrators
- Build a solid supply chain
- Advance laser technology

Contact information:

Colin Fitzgerald

Boulder, Colorado, USA

colin.fitzgerald@coldquanta.com

www.coldquanta.com/contact

303-440-1284



